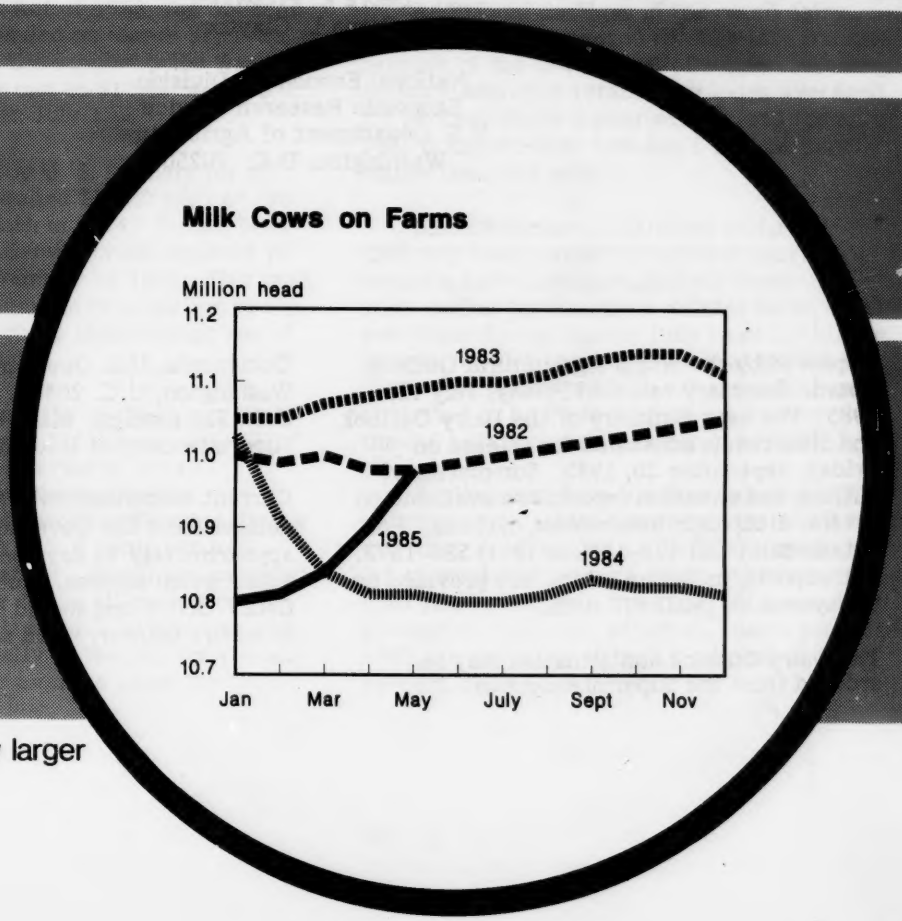
United States
Department of
Agriculture

Economic
Research
Service

DS-401
July 1985

Dairy

Outlook and Situation Yearbook



Dairy cow herd sharply larger

CONTENTS

Page	
4	Production
6	Prices
8	Utilization
9	Foreign Trade and Trends
10	Index of Special Articles Since 1973
16	List of Tables
16	List of Figures

Principal Contributor
Clifford M. Carman
(202) 447-8636

Statistical Assistant
LaVerne T. Williams
(202) 447-8636

Electronic Word Processing
Debra K. Fitzwater
Diana L. Claytor

National Economics Division
Economic Research Service
U.S. Department of Agriculture
Washington, D.C. 20250

Approved by the World Agricultural Outlook Board. Summary released Friday, July 12, 1985. The next summary of the Dairy Outlook and Situation is scheduled for release on Friday, September 20, 1985. Summaries of outlook and situation reports are available on several electronic information systems. For details call (402) 472-1892 or (301) 588-1572. Full reports, including tables, are provided by the system on (402) 472-1892.

The Dairy Outlook and Situation may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Subscription: $8 U.S., $10 foreign. Make checks payable to the Superintendent of Documents.

Current subscribers will receive renewal notices from the Government Printing Office approximately 90 days before their subscription expires. Notices will be sent ONLY ONCE and should be returned promptly to ensure uninterrupted service.

SUMMARY

The average number of milk cows on farms during May was 10.984 million head, up 183,000 (1.7 percent) since January and 179,000 above a year earlier. For all of 1985, the number of milk cows is expected to average about 0.5 percent more than last year. Some additional growth in the dairy cow herd is likely through this summer, followed by an expected drop during the fall because returns above feed costs will likely be lower.

Output per cow has increased from a year earlier. In May, it was 2.8 percent larger and for all of this year it may be 2 to 2.5 percent more than the 12,495 pounds of 1984. Milk production during calendar 1985 is expected to be 2 to 3 percent above the 135.4 billion pounds produced last year.

Under provisions of the Dairy and Tobacco Adjustment Act of 1983, the 50-cent per cwt assessment ended on March 31, 1985. Also, under the Act, the support price was reduced 50 cents per cwt to $12.10 on April 1, 1985, and to $11.60 on July 1.

Prices received by U. S. farmers for all milk during June averaged $12.20 per cwt, 70 cents below that month in 1984. During both 1983 and 1984, the all-milk price declined 70 cents per cwt from January to June. This year the drop was $1.80 because of a decline in the level of support and sharp gains in supplies of milk and dairy products.

For the first 6 months of this year, the all-milk price averaged $13.10 per cwt, 12 cents below the same period in 1984. However, adjusted for the legislated deductions, the effective all-milk price during January-June was $12.75, 7 cents per cwt higher than a year earlier. Assuming a support of $11.60 on October 1, the all-milk price is expected to decline through late summer and may increase seasonally in the fall but remain below last year. The average price for 1985 will likely be 45 to 75 cents per cwt under 1984's $13.45. The effective price for 1985 would be 20 to 50 cents lower than last year.

During times of significant price support purchases, the Commodity Credit Corporation (CCC) purchase prices for butter, cheddar cheese, and nonfat dry milk tend to become the floor for the wholesale market prices. Reflecting the lower purchase prices, wholesale spot prices for cheese and nonfat dry milk declined during April, May, and June.

With the price support level reduced on July 1, lower wholesale market prices that trace the lower purchase prices are expected this summer. Little, if any, upward price pressure is expected this fall on the wholesale spot prices.

Additional declines in the retail dairy price index are expected through late summer because of the lower level of support. During January-May, the retail dairy index averaged 3.1 percent above a year earlier, and for all of 1985 is expected to average 1 to 2 percent higher than last year.

Since February, USDA net removals (delivery basis) under the price support program have increased sharply from year-earlier levels. On a milkfat basis, total purchases during March-June were 5.6 billion pounds, up 41.7 percent from that period in 1984. For calendar 1985, net removals are projected to be 20 to 40 percent greater than the 8.6 billion pounds purchased in 1984.

Preliminary data for first-quarter 1985 indicate commercial disappearance of all milk and dairy products on a milkfat basis was up 0.6 percent (1.8 percent after adjustment for leap year). The gain for all of 1984 was 3.5 percent (3.2 percent adjusted). Sales for all of 1985 are expected to be 0.5 percent to 1.5 percent higher.

PRODUCTION

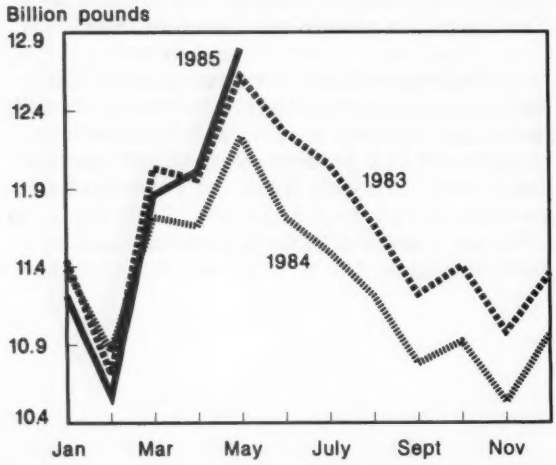
Expansion Continues

Milk production during March, April, and May was 1.1 percent, 3 percent, and 4.6 percent above a year earlier, respectively. April's level was 0.4 percent more than April 1983, and May's output 1.4 percent above May 1983. Production in April was larger than March, the first March-to-April gain since 1981. May's 12.8 billion pounds was the largest output for a single month since May 1957.

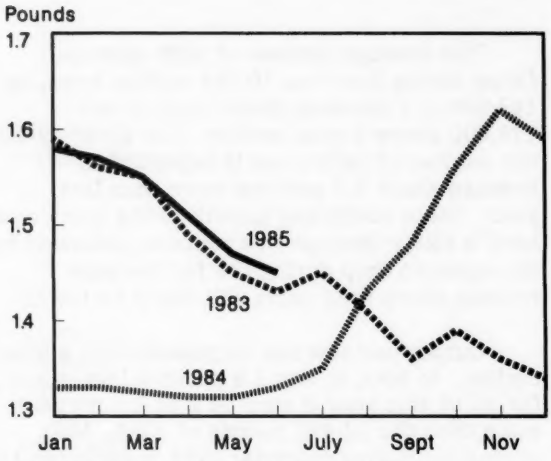
The gains this spring were the result of more cows and additional milk per cow. Both increases were likely the result of the very favorable milk-feed price relationships and the end of the paid diversion program on March 31, 1985. During January-May, milk production was up about 0.6 billion pounds, 1 percent. On a daily average basis, production was up about 1 billion pounds, 1.7 percent.

Of the 33 States surveyed during May, only two posted a drop in production from a year earlier. States with the greatest strengthening in milk production since the start of the year generally had low participation in the milk diversion program. The top six milk-producing States posted increases from May 1984. Milk output in Wisconsin, the largest producer, rose 5.3 percent in May and 2.9 percent for the January-May period on a daily average basis.

U.S. Milk Production by Months



Milk/16-Percent Feed Price Ratio*



* Pounds of 16 percent dairy feed equal to a pound of milk.

California, the second leading producer, posted a year-over-year gain for May of 6.1 percent and 5.8 percent for January-May on a daily average basis. Production in New York (ranked third) during May was 3.9 percent above one year earlier, leaving the January-May period about unchanged from last year. For Minnesota (fourth), Pennsylvania (fifth), and Michigan (sixth), production during May was up 3.2, 6.3, and 2.8 percent, respectively. During the first 5 months of 1985, production was down 0.6 percent in Minnesota and 1.4 percent lower in Michigan, but 2 percent higher in Pennsylvania. In total, the production of the leading six States for January-May (leap year adjusted) was up 2.1 percent.

Feed and Forage Prices Lower

The average price paid by farmers for 16-percent protein dairy feed declined this spring from early-winter levels. The mid-June price averaged $168 per ton, down $9 from January of this year, and $27 (14 percent) below a year earlier.

With milk prices declining proportionally more than feed prices since January, the milk-feed price ratio declined from 1.58 in January to 1.45 in June. However, compared with a year earlier, the dairy farmer during June was able to buy 12 pounds (9 percent) more concentrate for each cwt of milk sold. If adjusted for the 50-cent-per-cwt deduction

in effect last year, the milk–feed price ratio was 14 percent above June 1984. Thus, it appears likely that the June ratio was very favorable to continued relatively heavy rates of concentrate feeding. The feeding rate for grain and other concentrates on April 1 averaged 16.3 pounds per cow, up 2.5 percent from a year earlier. The milk–feed price ratio is expected to continue declining through late summer, but still remain conducive to heavy concentrate feeding.

Projections place the 1985 U.S. corn crop at 8.1 billion bushels. Added to the 1.2 billion carryover expected for 1984/85, the total supply for next season would be 9.3 billion bushels. Domestic use may increase modestly, but without a repeat of this year's heavy buying by the USSR, exports are likely to decline. Carryout stocks for 1985/86 are projected to be about 2.2 billion bushels, 31 percent of use. This stocks–to–use ratio is expected to keep farm level corn prices for 1985/86 near the loan rate of $2.55 per bushel. The season average price for 1984/85 is expected to be $2.65 per bushel, compared with last year's average of $3.25.

The 1985 soybean crop is projected to be 1.9 billion bushels. With an expected carryover of 285 million bushels, total supply for 1985/86 would be about 2.2 billion. Total use may increase slightly, but less than supply. Carryout stocks for 1985/86, therefore, are projected to be 390 million bushels. This level of stocks would push soybean prices lower. For 1985/86, farm level prices are expected to be $5.25 to $5.95 per bushel, compared with $5.85 this year and $7.81 in 1983/84. Prices of soybean meal (Decatur) are projected to be between $100 and $130 per ton in 1985/86. They are expected to average $122 per ton this year and were $188.20 last year.

May 1 stocks of hay were reported at 26.9 million short tons, one–third more than a year earlier. Farmers intend to increase area harvested in 1985 by almost 1 percent to 62 million acres. Normal weather would lead to a hay crop of nearly 150 million tons. Use is expected to be about 140 million tons (down 3 percent) because of fewer roughage consuming animal units in 1985/86. With larger supplies and weaker use, the season average price this year is expected to be $5 to $10 per ton below the May 1983 to April 1984 average of $73.80.

Milk Production To Continue Larger

Milk production for all of calendar 1985 will likely be 2 to 3 percent larger than the 135.4 billion pounds produced last year and could approach the record 1983 level. Gains in milk production are expected to slow late this year, but the level of output during the fourth quarter will still be larger than a year earlier.

Milk cow numbers in May averaged 179,000 more than a year earlier due in part to an increase of 64,000 head from March to April and 81,000 from April to May. Last year the herd declined during March and April. The number of milk cows is likely to increase through this summer, but with lower returns the herd may decline this fall. For all of 1985, the average number of milk cows is expected to be about 0.5 percent larger than last year.

Milk output per cow has improved from last year. During May, it was 2.8 percent above a year earlier, and for all of 1985 it will likely be 2 to 2.5 percent larger than the 12,495 pounds of 1984. Part of the gain will be due to more grain being fed. Some of the increase in grain feeding reflects the return to "normal" rates of concentrate use by the diversion program participants. However, most of the increased rate of feeding is likely because of favorable milk–feed price relationships.

Marketings Lower in 1984

Producers in 1984 marketed 3.6 percent less milk than the record 137.3 billion pounds of 1983. Whole milk sold to plants and dealers (including milk–equivalents of the cream sales) comprised 96.9 percent of total milk production in 1984. In 1983, sales to plants and dealers were 97.4 percent of total milk production. Likewise, milk sold directly to consumers by producers (includes institutional herds) declined in 1984. Use of milk on farms last year was 3.1 billion pounds, up 30 percent from 1983 and 2.3 percent of total production. In 1983, on–farm use was 1.7 percent of total production. All of the additional farm use in 1984 was as animal feed and resulted from the dairy diversion program.

Grade A milk (eligible for fluid markets) in 1984 accounted for 86 percent of all milk sold to plants and dealers, unchanged from

1983. Total Grade A marketings were 113 billion pounds last year, down 3.1 percent from 1983. Grade B (manufacturing use only) marketings in 1984 were 18.2 billion, down 6.7 percent. Grade B marketings in Wisconsin and Minnesota were 9.7 billion pounds, more than half of total manufacturing grade milk sold to plants and dealers.

PRICES

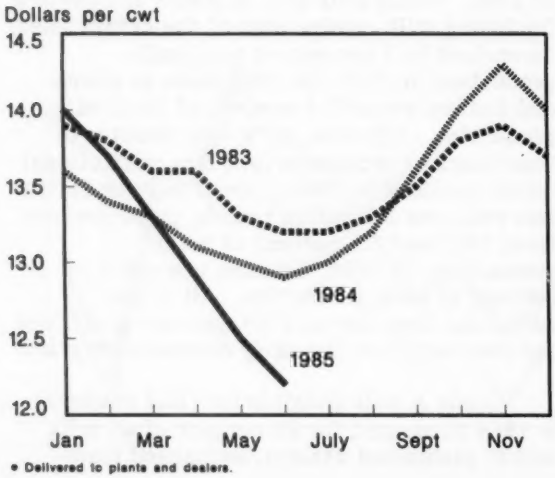
Farm Milk Prices Lower

Prices received by farmers in June were below a year earlier because of the lower support price and more than ample supplies of milk and dairy products. Assuming a support price of $11.60 per cwt on October 1, and with continued excess supplies, milk prices during the second half of this year are expected to average $1.00 to $1.30 below a year earlier.

Prices received by farmers for all milk during June averaged $12.20 per cwt, 70 cents below June 1984. However, after adjustment for differences in deductions, the June average was only 20 cents below last year. During both 1983 and 1984, the all-milk price declined 70 cents per cwt from January to June. This year the drop was $1.80, reflecting a lower level of support and sharp gains in milk supplies.

For the first 6 months of this year, the all-milk price averaged $13.10 per cwt, 12 cents below the same period in 1984. However, adjusted for the deductions, the effective all-milk price during January-June was $12.75, about 7 cents per cwt higher than a year earlier. With a support of $11.60 on July 1, the all-milk price is expected to decline through late summer. Assuming a support of $11.60 on October 1, the all-milk price will likely increase seasonally in the fall but remain below last year. The average price for 1985 will likely be 45 to 75 cents per cwt below 1984's $13.45. The effective price for 1985 would be 20 to 50 cents lower than last year.

All Milk Prices[a]



[a] Delivered to plants and dealers.

Minimum Class I prices in Federal order markets have continued to decline and are expected to fall further in coming months. During August, the minimum Class I prices will average $13.37 per cwt, a drop of about $1.50 from January, and nearly 90 cents below last August. Relative to year-earlier levels, Class I prices negotiated by cooperative associations have also fallen, but not as much as minimum Federal order prices. As a result, the over-order payments in Federal order markets have increased from a year ago.

Milk Cash Receipts Lower

For all of 1984, cash receipts from sales of milk and cream to plants and dealers and from direct marketings to consumers totaled $17.9 billion, down 4.4 percent from 1983. The decline was principally the result of 3.6 percent less milk marketed. Meanwhile the combined average return per cwt marketed was $13.54, down 0.9 percent from 1983.

Dairy farm cash receipts in 1983 and 1984 were affected directly by the price-support program. From April 16 through August 31, 1983, milk prices to farmers were reduced by 50 cents a cwt.

There were two deductions during September-November 1983, each 50 cents a cwt. One of the deductions was refunded if the dairy farmer reduced marketings 8.4 percent or more from corresponding base marketings for 1980/81 and 1981/82.

From December 1, 1983, until March 31, 1985, a mandatory and nonrefundable deduction of 50 cents a cwt on commercial marketings was in effect. Also during 1984 and 1985, direct payments were made to milk

diversion program participants who had complied with provisions of their contracts. After adjusting cash receipts for diversion payments and net deductions, the total effective receipts were about $18.2 billion in 1983 and about $17.8 billion in 1984, compared with $18.2 billion in 1982.

Support Reduced; Wholesale Prices Lower

Under provisions of the Dairy and Tobacco Adjustment Act of 1983, USDA reduced the support price to $12.10 per cwt for milk of average fat test ($11.81 for milk testing 3.5 percent fat) on April 1, 1985, because removals from April 1, 1985, through March 31, 1986, were expected to be greater than 6 billion pounds (milk equivalent). With no change in the manufacturing allowances used in the calculations, the full 50-cent-per-cwt reduction in the support level was reflected in reduced purchase prices.

In the butter and nonfat dry milk complex, the full 50-cent reduction was allocated to nonfat dry milk, thereby leaving the butter purchase price at $143.25 cents per pound and reducing the purchase price for powder 6.25 cents to 84.75 cents per pound. In addition, the support purchase price premium for butter at New York was discontinued.

In the case of natural cheddar cheese, the support purchase price was reduced 6 cents per pound to 128.75 cents for 40- or 60-pound blocks based upon the 50-cent cut in support and a reinstituted positive value for whey solids-not-fat. The difference between cheese blocks and barrels was increased from 3 to 4.25 cents per pound, thus cheese sold to the Government in 500-pound barrels was reduced 7.25 cents to 124.50 cents per pound.

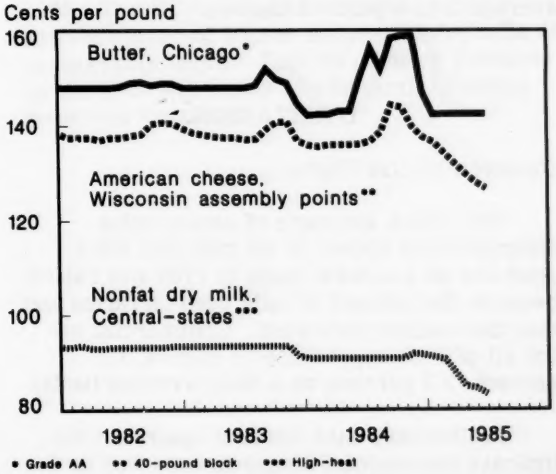
Also under provisions of the Dairy and Tobacco Adjustment Act of 1983, USDA reduced the support price to $11.60 per cwt at average fat test ($11.31 for milk testing 3.5 percent fat) on July 1, 1985, because removals from July 1, 1985 to June 30, 1986, were expected to be greater than 5 billion pounds (milk equivalent). The 50-cent reduction for milk used to manufacture butter and nonfat dry milk was allocated one-third to butter and two-thirds to powder, thereby reducing the purchase price for butter 3.5 cents per pound to $139.75 cents and lowering the powder price 4 cents per pound to $80.75 cents. To reflect the 50-cent lower support price both block and barrel cheese purchase prices were reduced 4.75 cents per pound to 124 cents and 119.75 cents, respectively.

During times of significant price support purchases, the CCC purchase prices for butter, cheddar cheese, and nonfat dry milk tend to become the floor for the wholesale market prices. Reflecting the lower purchase prices, the wholesale spot prices for cheese and nonfat dry milk were lower during April, May, and June.

Cheddar cheese (Wisconsin assembly points, 40-pound blocks) during June averaged 126.75 cents per pound, 7.5 cents below February and 9.3 cents below a year earlier. Likewise, the wholesale price of nonfat dry milk (high heat, Central States area), at 83.28 cents a pound during June, was down 7.3 cents from February and 7.5 cents below June 1984. Meanwhile, the price of butter (Grade AA, Chicago) during June averaged 142.38 cents per pound, unchanged since February, but 7.7 cents below a year earlier.

With the price support level reduced on July 1, lower wholesale market prices that trace the lower purchase prices are expected this summer. Little, if any, upward price pressure is expected this fall on the wholesale

Wholesale Dairy Product Prices



spot prices if the level of support is held at $11.60 per cwt on October 1.

The Bureau of Labor Statistics (BLS) wholesale price index for all dairy products during May was 250.1 (1967=100), down 2.8 percent since November but 0.5 percent above a year earlier. The BLS wholesale dairy index is expected to continue declining through late summer. The index for January–May averaged 1.7 percent above a year earlier, but for all of 1985 is likely to average unchanged to 1 percent lower than last year.

Retail Dairy Prices Will Average Higher

The BLS retail dairy price index for all of 1985 is expected to average 1 to 2 percent higher than last year. During January–May, the retail dairy index has averaged 3.1 percent above a year earlier and in May was down 0.3 percent from February, but 2.9 percent higher than one year earlier. From mid-winter to mid-spring the index has declined. This drop resulted from retail price declines for butter and cheddar cheese, reflecting lower wholesale prices from November 1984 through April 1985. Additional declines in the retail dairy price index are expected through late summer because of the lower April 1 and July 1 level of support.

In comparison, the BLS retail price index for all food items was down about 0.2 percent from February to May. However, during January–May retail prices of all food items averaged 2.5 percent higher than a year earlier, and for all of 1985 are expected to average 2 to 4 percent higher.

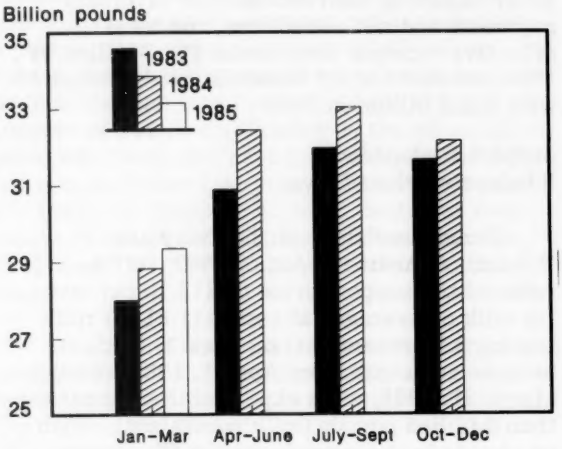
UTILIZATION

Commercial Use Higher

The USDA estimate of commercial disappearance (sales) of all milk and dairy products on a milkfat basis in 1984 was raised because the amount of milk used on farms was less than earlier indicated. Commercial use for all of 1984 represented a gain of 3.5 percent (3.2 percent on a daily average basis).

Preliminary data for first-quarter 1985 indicate commercial disappearance was up 0.6

Commercial Use of All Milk Products[a]



[a] Milkfat basis. Jan–Mar 1984 adjusted for leap year.

percent (1.8 percent leap year adjusted). Use is likely to average above a year earlier during the remainder of 1985 because of lower real prices for dairy products, a larger population, higher per capita real incomes, and additional dairy product promotion. Taking into account the above factors, an increase exceeding population growth could be expected. However, due to leap year in 1984 and the very strong sales during April–June last year, an increase in commercial disappearance of 0.5 to 1.5 percent is expected for all of 1985.

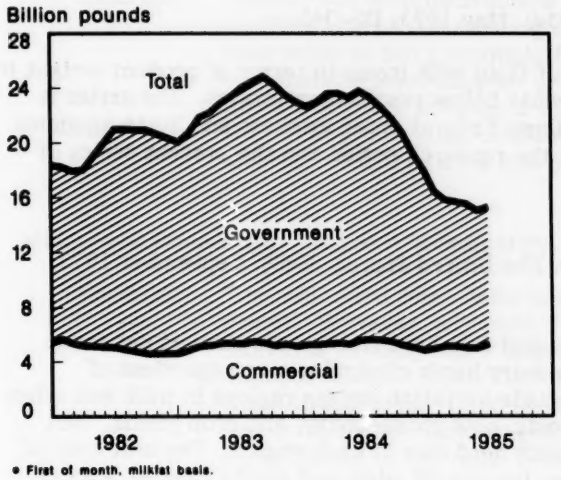
USDA Stocks Lower

Stocks held by USDA on June 1 were equivalent to 10 billion pounds of milk (milkfat basis), down 8.2 billion (45 percent) from a year earlier. Holdings by the Government are smaller than a year earlier due to the reduced amount of net removals relative to the amount of donations in 1984 and early 1985. However, Government stocks are likely to increase from current levels in coming months because removals will likely be larger than program uses.

Net Purchases Larger

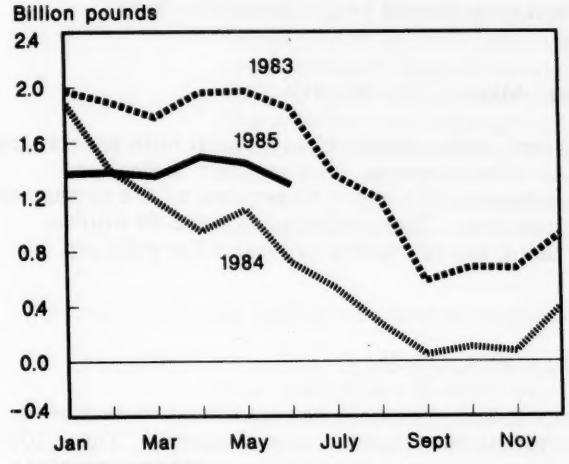
Since February, USDA net removals (delivery basis) under the price support program have increased sharply from year-earlier levels. On a milkfat basis, total purchases during March–June were equal to 5.6 billion pounds of milk, up 41.7 percent

Dairy Product Stocks*



* First of month, milkfat basis.

USDA Dairy Product Purchases*



* Net removals, milkfat basis.

from the same period in 1984. For calendar 1985, net removals are projected to be 20 to 40 percent greater than the 8.6 billion pounds purchased in 1984. For the first 6 months of 1985, net removals were equal to 8.4 billion pounds of milk.

FOREIGN TRADE AND TRENDS

World Dairy Situation and Outlook

World production of milk this year is expected to continue near the level of 1984. Cow milk production for the 38 major producing countries last year totaled 409 million tons, a little below the record 1983 level and the first decline since the late 1960's. The expected milk production increase in the U.S. during 1985 is being balanced by an expected 2 percent drop in the European Community (EC) in response to the milk delivery quota scheme.

Prices on international dairy product markets are weak, particularly for butter and butter oil. The EC sold 220,000 tons of butter to the Soviet Union last fall at prices well below the GATT minimums of $1,200 per metric ton. The international market for butterfat deteriorated and the GATT minimums for butter have been reduced to $1,000 per metric ton. Intense competition for butter and butteroil export sales is continuing to depress the world market. Cheese prices, though relatively weak, are quite stable as are prices for nonfat dry milk. Exports of dairy products by the major producing nations are expected to increase in 1985. The EC appears determined to hold surplus stocks of butter and nonfat dry milk at manageable levels. Exports of dairy products by the U.S. will be up as substantial foreign donations continue.

INDEX OF SPECIAL ARTICLES SINCE 1973

Research Estimates Of Fluid Milk Sales Since 1954; May 1973, DS–345.

Abstract: Research now shows that sales of fluid milk items in terms of product weight in the United States may be somewhat below previous estimates. The series is based largely on reported data from Federal order markets and State agencies. Comparisons are made between the research series and the present series of fluid milk sales.

Dairy Farm Income And Milk Production Costs In The United States, 1969; September 1973, DS–347.

Abstract: Comparisons among nine regions and five herd size groups showed net farm income in 1969 to be similar for dairy herds of similar size regardless of location. This occurred despite wide variation among regions in milk and other product prices, land and labor costs, cow productivity, and crop yields. Net returns increased significantly with herd size in each region. The unit cost of producing milk, including charges for unpaid labor and equity capital, varied significantly by herd size and among regions for similar size farms. Total production costs per 100 pounds of milk were highest for farms with small dairy herds, dropped sharply as herd size increased (to about a 40–cow herd in most regions), and then leveled off. Regional production costs per 100 pounds were highly correlated with regional average milk prices received and were lowest in Minnesota and Wisconsin, followed very closely by the Northern Plains.

Promotional Activities Under Federal Milk Orders; March 1974, DS–349.

Abstract: Advertising and promotion programs, now authorized in Federal milk orders, are currently in effect in 22 of the 61 order markets. The program is financed through voluntary producer assessments, with about 80 percent of the producers participating in the 22 markets last year. They contributed some $8 million toward national and local advertising and promotion programs for milk and dairy products.

Changes In Numbers And Size Of Dairy Plants; July 1974, DS–351.

Abstract: The number of plants manufacturing dairy products has continued to decline in the United States while average output per plant has gained sharply. The 3,100 dairy manufacturing plants in 1973 were only about half the number operating in 1961, but the average volume of milk handled per plant had risen over 80 percent. Butter plants showed the sharpest decline in number, with cheese plants showing the least. Plants making Italian cheese actually increased in number during the past decade. Smallest declines in plant numbers occurred on the West Coast, as that area increased its share of dairy products output. Technological developments and innovations in dairy processing have added to capital requirements and therefore increased optimum volume per plant.

The Impact of Dairy Imports On The U.S. Dairy Industry; March 1975, DS-354.

Abstract: Three trade alternatives are examined for the U.S. dairy industry: (1) a continuation of the existing dairy price support program and import quotas, (2) free trade in dairy products for all countries, and (3) an open U.S. market with no domestic price support or import quotas for dairy products. The estimated impact of these policies is shown on: levels of imports into the United States; U.S. milk production, consumption, and prices; net-cash income; and number and size of dairy farms and processing plants.

Milk-Feed Price Ratio—A Limited Indicator; September 1975, DS-357.

Abstract: The milk-feed price ratio is a useful way of comparing milk and concentrate prices. However, any milk-feed price relationship has limited value as an indicator of dairymen's economic well-being since it does not account for changes in other costs. During periods of rapidly fluctuating grain prices, other ways of expressing milk-feed price relationships, such as the difference in milk and concentrate costs or returns over concentrate costs, may be important supplements to the milk-feed price ratio.

Farm Milk Price Relationships—The 1973-75 Experience; May 1976, DS-360.

Abstract: During the rapid changes in farm milk prices during 1973-75, the prices paid for milk of different grades, uses, and in different regions adjusted at uneven rates but the basic relationships of these prices did not change. The Minnesota-Wisconsin price reflected changes in market conditions more rapidly than prices of manufacturing grade milk in other areas. The comparative prices paid by American cheese plants and butter-powder plants reflected changes in the relative sales strength of these products but moved back into a competitive position as production adjusted. The relationship of Grade A and manufacturing grade milk during 1973-75 was about the same as in 1969-72, as lower fluid utilization was offset by a wider difference between negotiated Class I prices and minimum Federal order Class I prices.

Costs of Producing Milk In The United States, 1974; July 1976, DS-361.

Abstract: A survey of nearly 1,600 dairy farmers in 24 major milk producing areas showed that total costs in 1974, excluding all land allocations, of producing milk averaged $8.06 per cwt with homegrown feed valued at cost of production. This compares with $8.93 when homegrown feed is valued at average prices received by farmers. Including land allocations, with the owner-operated portion of total land operated valued at its (1) current value for agricultural uses or (2) average acquisition value, adds $0.99 or $0.52 to production costs. Total direct costs averaged $6.74 per cwt with homegrown feed valued at cost of production. Feed and labor costs accounted for about 71 percent of the total. This compares with an average of milk prices as reported by the farmers interviewed of $8.39 per cwt.

Whey Supply and Utilization; July 1976, DS–361.

Abstract: The supply of whey has increased rapidly in recent years due to the growth of the cheese industry. These supply trends are examined along with the current utilization of whey products and some of the problems involved. Price trends for dry whey, price comparisons with nonfat dry milk and some reasons behind the price movements are reported.

Changing Utilization Of Milk and Components Of Milk: Implications For The Future; July 1978, DS–371.

Abstract: Shifts in demand for various dairy products have substantially altered patterns of milk utilization. There has been much more milk used in cheese production, much less whole milk used for butter–powder output, and slightly more milk sold as fluid products. However, butter production has absorbed sharply increasing amounts of milkfat resulting from standardization and cheese manufacture. Expected future changes in demand for dairy products will have further substantial impact on industry structure, price determination, and the price support program.

Costs Of The Dairy Price Support Program; June 1981, DS–385.

Abstract: This article discusses the basic cost concepts, and how they are applied. Also discussed are certain aspects of dairy product sales and donations from the CCC inventories, and how these relate to the cost concepts used in determining program costs.

An Update Of State Milk Control Programs; September 1981, DS–386.

Abstract: The article reports the current status of State milk control pricing programs and discusses the changes that have taken place since 1975. The number of States setting milk prices at the resale level has declined steadily over the past 5 years, while the number involved in producer price fixing has remained fairly stable.

Costs And Margins For Fluid Whole Milk And Butter; March 1982, DS–388.

Abstract: This article reports the farm/retail spread for a 1/2–gallon container of Grade A whole milk and butter in a 1–pound carton of quarter cuts. The farm value of a 1/2–gallon of milk in 1981 was about 62 cents, while it was about $1.33 for a pound of butter.

National And Regional Costs And Returns Of Producing Milk; September 1982, DS–390.

Abstract: Direct costs plus ownership costs for the dairy enterprise averaged $13 per cwt of milk in the United States in 1981, compared with $12.20 in 1980 and $10.61 in 1979. After accounting for direct (cash) costs of $9.28 in 1981, dairy farmers received a return of $5.69 a cwt. This compared with returns of $5.50 in 1980 and $5.63 in 1979. Total returns to operator and family labor and management averaged $1.97 per cwt of milk in 1981, compared with $2.13 in 1980 and $2.81 in 1979.

Cheese Donations and Their Effect On Commercial Disappearance; June 1983, DS-393.

Abstract: The free cheese distribution that USDA began in early 1982 apparently resulted in some displacement of commercial sales of American-type cheese in fourth-quarter 1982 and first-quarter 1983. The long-term trend in cheese consumption is up, and commercial disappearance of other-than-Amercian-type cheese rose 11.9 percent in fourth-quarter 1983. However, disappearance of American-type cheese fell 5.1 and 15.2 percent, respectively, during the two quarters. Meanwhile, during the last 3 months of 1982, the free cheese distribution averaged 20.1 million pounds a month--11.4 percent of the fourth-quarter 1982 commercial disappearance. Likewise, for the first 3 months of 1983, the free distribution averaged 43.2 million pounds a month--28.2 percent of commercial disappearance.

Update of State Milk Promotion Programs; June 1983, DS-393.

Abstract: By the middle of 1983, 20 States will have milk promotion programs under the authority of State Legislation. In 19 of the States, producers are assessed while four of the States also assess handlers. These assessments are mandatory in all except one State, but seven provide for refunds. Together the 20 States represent about two-thirds of the milk produced in this country.

Impact of Ultra-High Temperature Milk On the U.S. Dairy Industry; September 1983, DS-394.

Abstract: Milk pasteurized by "ultra-high temperature" (UHT) methods and packaged aseptically would eliminate perishability as a primary characteristic of fluid milk. Relative costs of processing, distributing, and retailing were estimated using economic engineering, linear programming, and simulation techniques. Costs of UHT containers were sharply higher, but other processing and distributing costs were similar to those for traditional fluid products. Retailing costs for UHT were somewhat lower. Equilibrium retail UHT prices ranged from 3 to 12 percent higher. Adoption of UHT technology was not found to substantially affect the costs of handling supply-demand variability for fluid milk.

A Longrun Look At Margins And Productivity In Fluid Milk Processing; September 1983, DS-394.

Abstract: Analysis of data on margins in fluid milk processing showed strong productivity gains since 1961. Gross margins grew substantially slower than the average of all food industries. Productivity advances during 1961-72 were accomplished largely by the substitution of capital for labor. This left the industry with excess capacity and low net margins. Since 1972, productivity of both labor and capital has been boosted by pervasive improvements that individually were not of major importance. However, the aggregate effect has been substantial declines in real gross margins, improved net margins, lower real retail prices, and expanded demand for raw milk.

National And Regional Costs And Returns Of Producing Milk; January 1984, DS-395.

Abstract: For 1983, total cash expenses for the U.S. dairy enterprise are forecast to have averaged about $10.23 per cwt of milk, compared with an estimated $9.61 in 1982 and $9.70 in 1981. After accounting for cash expenses, in which the two 50-cent deductions in 1983 are included, dairy farmers probably received a return of $4.42 per cwt, a decline of 63 cents (12 percent) from 1982, and $0.82 (16 percent from 1981). Net returns to owned inputs (capital, land, unpaid family labor, management, and risk) are forecast to be $4.21 per cwt, compared with an estimated $5.02 in 1982 and $5.03 in 1981.

Participation In The Milk Diversion Program; March 1984, DS-396.

Abstract: The Dairy and Tobacco Adjustment Act of 1983 resulted in a program to pay dairy farmers not to market milk. Nearly 38,000 producers signed contracts which would result in contracted diversions of 7.5 billion pounds in calendar 1984, 5.4 percent of total U.S. production in 1983. However, as a group, participating producers had already reduced their marketings below their base. Therefore, the effective reduction in marketings from 1983 to 1984 by participants will be about 3.8 percent of 1983 production.

Profitability Of Milk Production In Selected States; March 1984, DS-396.

Abstract: This article estimates the relative rate of return to investment in milk production in four States: Minnesota, New Mexico, Arizona, and Washington. Results show the regional shifts in milk production could continue as returns are favorable in those areas showing the greatest expansion during the 1970's.

Household Characteristics, Frequency Of Use, And The Demand For Dairy Products; June 1984, DS-397.

Abstract: Results from the USDA Nationwide Food Consumption Survey indicate that households with higher incomes spend less per person on fluid whole and canned milk for use at home than do lower income households, but they spend more on most other dairy products. For example, a 10-percent increase in income generates a 1.3-percent decline in expenditures at home for fresh whole milk, but a 3.5-percent increase for cream. Geographic location, race, and age of household members, as well as the season of the year, also affect spending for the 20 dairy products included in the analysis.

Impacts Of Nationwide Adoption Of The California Solids Standards For Fluid Milk Products; September 1984, DS-398.

Abstract: Nationwide adoption of standards similar to the current California standards would raise retail prices for fluid milk products about 3.5 cents per half-gallon (3 percent). The change would generally increase the nutrient content of milk, but would cost an estimated $5.9 million annually to enforce effectively. It could result in somewhat increased sales of butterfat and solids-not-fat in fluid milk products, but the magnitude is unclear. In addition, it would likely result in only a small reduction in Government purchases of surplus dairy products.

California and Canadian Quota Plans; December 1984, DS–399.

Abstract: Various types, provisions, and objectives of base and quota systems are discussed. The history and experience under California and Canadian quota systems are presented. In Canada, quotas on fluid and industrial milk deliveries have balanced milk supplies and demand with reasonable success, but the program has generated large direct and indirect costs. The impact of the California quota plan on milk supplies is unclear. Problems related to capitalized base values, increased milk production costs, and restricted resource adjustments are likely to arise if base plans are used to control milk supplies effectively.

National and Regional Costs and Returns of Producing Milk; December 1984, DS–399.

Abstract: For 1984, total cash expenses by U.S. dairy farmers may average about $10.73 per cwt of milk, compared with an estimated $10.54 in 1983, $9.86 in 1982, and $9.74 in 1981. After accounting for cash expenses, including the 50–cent deductions per cwt in 1983 and 1984, producers probably will earn $3.70 per cwt, a decline of 44 cents (11 percent) from 1983, $1.10 (23 percent) from 1982, and $1.50 (29 percent) from 1981. Net returns to owned inputs (capital, land, unpaid family labor, management, and risk) are forecast to be $3.61 per cwt in 1984, compared with an estimated $4.15 in 1983, $4.78 in 1982, and $4.99 in 1981.

The Effects of Various Dairy Support Price Alternatives; March 1985, DS–400.

Abstract: Three scenarios of a dairy sector model are simulated through 1987 to examine some of the implications of the effect of alternative price support levels. Results indicate that rising milk cow inventories and production per cow will again lead to production increases near or exceeding increases in commercial disappearance, unless price supports are substantially reduced. Consequently, in the absence of substantial price support reductions, net Government removals of dairy products would be expected to remain large and could begin trending upward again.

LIST OF TABLES

Table	Page	
1	17	U.S. dairy situation at a glance
2	18	Milk production, milk per cow, and milk cows on farms, by months, 1982–85, with comparisons
3	19	Milk production and factors affecting supply, selected years, 1970–84
4	20	Milk/16–percent protein dairy feed price ratio, by months, 1981–85
5	20	Utility cow prices, Omaha, by months, 1982–85
6	20	Corn, soybean meal, and 16–percent protein dairy ration prices, 1983–85
7	21	Milk used and marketed by farmers, 1976–84
8	21	Manufacturing grade milk marketed, selected States, selected years
9	22	Milk prices received by farmers, by months, 1982–85
10	23	Cash receipts from farm marketings of milk and cream, by State and farm production region, 1978–84
11	24	Wholesale dairy product prices and indexes, by months, 1975–85
12	25	Retail price indexes, for all urban consumers, by months, 1978–85
13	26	Retail dairy product prices, by months, 1984–85
14	26	Production of selected manufactured dairy products, 1975–79
15	26	Production of selected manufactured dairy products, 1980–84
16	27	Production of selected manufactured dairy products, 1984–85, with comparisons
17	27	Wisconsin out–of–State milk shipments
18	28	Commercial disappearance: Total milk, 1970–80
19	28	Commercial disappearance: Total milk, annual and quarters, 1981–85
20	29	Commercial disappearance: Selected manufactured dairy products, 1970–85
21	30	Dairy products: Per capita consumption, United States, 1970–84
22	31	Per capita civilian consumption of selected cheese varieties, 1970–84
23	32	Factors influencing and indicative of the demand for milk and dairy products, selected years, 1965–84
24	33	Use of market supply of milk, 1975–84
25	34	Milk: Supply and utilization of all dairy products, 1970–84
26	35	Milk solids in all dairy products: Production and disposition, 1970–84
27	36	Selected dairy products: Supply and utilization, 1970–84
28	37	U.S. dairy product ending stocks, annual and quarters, 1970–85
29	38	Dairy products removed from the commercial market by USDA programs, 1970–85
30	39	Uncommitted CCC inventories, selected dates, 1970–85

LIST OF FIGURES

Page	
1	Milk Cows on Farms
4	U.S. Milk Production by Months
4	Milk/16–Percent Feed Price Ratio
6	All Milk Prices
7	Wholesale Dairy Product Prices
8	Commercial Use of All Dairy Products
9	Dairy Product Stocks
9	USDA Dairy Product Purchases

Table 1.--U.S. dairy situation at a glance

Item	Unit or base period	Quarterly data					
		1st 1983	1st 1984	2nd 1984	3rd 1984	4th 1984	1st 1985
Production and cow numbers:							
Total milk	Mil. lb	34,179	33,953	35,609	33,468	32,414	33,632
Milk per cow	Lb	3,090	3,109	3,296	3,097	2,996	3,109
Number of milk cows	Thou.	11,058	10,925	10,805	10,809	10,819	10,817
Prices received by farmers:							
All milk, sold to plants, 100 pounds	Dol	13.77	13.43	13.00	13.27	14.10	13.67
Percentage of parity 1/	Pct	62	57	57	58	59	57
Manufacturing grade milk, 100 pounds	Dol	12.80	12.43	12.20	12.37	13.17	12.60
Parity equivalent	Dol	19.78	21.17	21.32	21.32	21.23	21.53
Fat content	Pct	3.75	3.78	3.62	3.56	3.84	3.78
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol	12.58	12.06	12.08	12.37	12.63	12.19
Milk eligible for fluid market, 100 pounds	Dol	13.93	13.57	13.10	13.40	14.23	13.87
Price ratio and dairy ration value:							
Milk/16-percent feed price relationship	Lb	1.57	1.33	1.32	1.40	1.59	1.57
Value of concentrate ration fed, milk cows	Dol	7.28	8.58	8.32	8.46	7.95	7.54
Farm cash receipts from dairy products	Mil. dol	4,611	4,479	4,579	4,305	4,457	0,000
Production of factory products:							
Butter	Mil. lb	381.9	343.7	289.9	210.4	259.3	333.1
American cheese, whole milk	Mil. lb	717.2	687.5	758.2	610.8	591.7	655.7
Cheese other than American	Mil. lb	452.1	472.8	500.0	498.2	554.5	501.8
Canned milk, unskimmed	Mil. lb	161.1	154.8	173.7	159.9	159.2	138.1
Dry whole milk	Mil. lb	26.8	30.8	33.0	28.4	27.5	36.9
Frozen products 2/	Mil. gal	264.2	271.3	350.6	355.3	253.2	260.7
Creamed cottage cheese	Mil. lb	181.4	184.8	192.2	188.7	168.3	177.8
Total (milkfat basis) 3/	Mil. lb	20,783	19,817	20,703	17,951	17,657	19,302
Nonfat dry milk, human use	Mil. lb	369.0	313.6	355.0	265.6	224.7	284.1
Wholesale prices:							
Butter, Grade A, Chicago, pound	Ct	147.2	141.3	145.3	154.8	153.9	141.3
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct	138.6	135.7	135.9	139.9	140.3	134.3
Evaporated milk, case	Dol	22.16	22.23	22.23	22.23	22.23	22.23
Nonfat dry milk, pound, f.o.b. Central States, high heat	Ct	93.4	90.7	90.7	90.7	91.3	90.4
Dairy products (BLS)	1967=100	250.8	248.5	249.1	252.5	256.7	254.3
Retail prices (BLS):							
Consumer price index 4/	1967=100	293.2	306.4	309.7	313.1	315.4	317.4
All food 4/	1967=100	289.2	301.2	301.9	304.1	304.5	308.8
All dairy products 4/	1967=100	249.6	250.8	251.4	253.3	257.2	259.0
Fluid milk and cream	12/77=100	136.7	136.5	136.6	137.0	139.6	140.6
Whole milk	1967=100	223.5	223.0	223.3	223.7	228.4	229.7
Other	12/77=100	137.3	137.2	137.3	138.0	139.9	141.2
Manufactured dairy products	12/77=100	147.2	149.3	149.7	151.8	153.6	154.6
Butter	1967=100	253.5	254.2	253.6	263.9	269.0	265.1
Cheese	12/77=100	145.4	146.7	146.7	148.4	149.9	150.5
Frozen desserts	12/77=100	152.1	155.2	156.5	158.0	159.4	162.3
Other	12/77=100	142.4	146.4	147.8	148.8	151.1	152.9
Margarine	1967=100	257.0	279.6	282.9	295.3	295.3	297.5
Stocks, end of quarter:							
Creamery butter	Mil. lb	466.8	499.4	529.3	516.7	426.3	296.5
Cheese total 5/	Mil. lb	1,064.2	1,266.4	1,298.8	1,288.2	1,211.1	1,061.9
Canned milk, unskimmed	Mil. lb	52.9	47.7	54.6	91.2	103.9	42.0
Dry whole milk	Mil. lb	6.0	6.4	5.8	8.6	7.1	5.4
Total (milkfat basis) 6/	Mil. lb	20,054	22,646	23,610	23,332	20,742	16,429
Nonfat dry milk	Mil. lb	1,282.0	1,394.9	1,421.0	1,421.2	1,335.1	1,231.7
Commercial disappearance:							
Creamery butter	Mil. lb	209.5	194.0	241.3	215.6	251.5	205.7
Cheese, American	Mil. lb	466.9	545.1	572.8	564.4	571.3	515.2
Cheese, other than American	Mil. lb	494.6	530.9	559.8	582.9	637.2	558.5
Canned milk, unskimmed	Mil. lb	160.8	144.1	136.3	143.6	219.7	125.7
Milk in all products	Mil. lb	27,992	29,181	32,425	33,020	32,137	29,342
Nonfat dry milk	Mil. lb	109.6	124.4	109.6	141.6	120.1	104.7
USDA net removals:							
Butter	Mil. lb	172.5	143.3	47.2	1.5	10.7	128.7
Cheddar cheese	Mil. lb	209.7	150.6	180.9	81.0	34.8	145.7
Nonfat dry milk	Mil. lb	271.6	205.3	230.2	146.0	97.0	177.6
Evaporated milk	Mil. lb	5.3	7.6	3.6	5.1	2.8	7.1
Total (milkfat basis)	Mil. lb	5,645	4,463	2,769	842	570	4,113

1/ Seasonally adjusted prices as percentage of parity price. 2/ Ice cream, ice milk, and sherbet. 3/ Includes manufactured products for which current data are available. 4/ For all urban consumers starting January 1978. 5/ Natural plus processed American cheese held by CCC. 6/ Excludes cream and bulk condensed milk.

Table 2.--Milk production, milk per cow, and milk cows on farms, by months, 1982-85, with comparisons

Item	1982	1983	1984	1985 1/	Change from year earlier 1982	1983	1984	1985
	----- Million pounds -----				---- Percent ----			
Milk production 2/								
January	11,106	11,443	11,375	11,209	+2.8	+3.0	-0.6	-1.5
February	10,361	10,707	10,855	10,566	+2.1	+3.3	+1.4	-2.7
March	11,700	12,029	11,723	11,857	+1.6	+2.8	-2.5	+1.1
April	3/ 11,607	11,956	11,662	12,007	+0.7	+3.0	-2.5	+3.0
May	3/ 12,191	12,616	12,227	12,790	+0.9	+3.5	-3.1	+4.6
June	3/ 11,781	12,261	11,720		+2.0	+4.1	-4.4	
July	3/ 11,618	12,046	11,485		+2.3	+3.7	-4.7	
August	3/ 11,370	11,672	11,206		+2.4	+2.7	-4.0	
September	3/ 10,939	11,218	10,777		+3.0	+2.6	-3.9	
October	3/ 11,053	11,400	10,918		+2.7	+3.1	-4.2	
November	3/ 10,644	10,979	10,529		+2.4	+3.1	-4.1	
December	3/ 11,135	11,345	10,967		+2.2	+1.9	-3.3	
Total 4/	135,505	139,672	135,444		+2.1	+3.1	-3.0	
	---- Pounds ----				---- Percent ----			
Milk per cow 2/								
January	1,010	1,035	1,032	1,038	+1.4	+2.5	-3.0	+0.6
February	943	969	995	977	+0.9	+2.8	+2.7	-1.8
March	1,064	1,086	1,082	1,094	+0.3	+2.1	-0.4	+1.1
April	3/ 1,057	1,079	1,079	1,101	-0.5	+2.1	0.0	+2.0
May	3/ 1,110	1,137	1,132	1,164	-0.1	+2.4	-0.4	+2.8
June	3/ 1,072	1,105	1,085		+0.9	+3.1	-1.8	
July	3/ 1,056	1,085	1,064		+1.1	+2.7	-1.9	
August	3/ 1,033	1,051	1,037		+1.5	+1.7	-1.3	
September	3/ 993	1,008	996		+2.2	+1.5	-1.2	
October	3/ 1,002	1,024	1,009		+1.9	+2.2	-1.5	
November	3/ 964	985	973		+1.7	+2.2	-1.2	
December	3/ 1,008	1,021	1,014		+1.7	+1.3	-0.7	
Total 4/	12,306	12,585	12,495		+1.0	+2.3	-0.7	
	----- Thousands -----				---- Percent ----			
Milk cows on farms 5/								
January	10,997	11,051	11,026	10,801	+1.4	+0.5	-0.2	-2.0
February	10,993	11,051	10,910	10,811	+1.3	+0.5	-1.3	-0.9
March	10,996	11,073	10,839	10,839	+1.3	+0.7	-2.1	0.0
April	3/ 10,981	11,078	10,810	10,903	+1.1	+0.9	-2.4	+0.9
May	3/ 10,983	11,093	10,805	10,984	+1.0	+1.0	-2.6	+1.7
June	3/ 10,990	11,095	10,801		+1.0	+1.0	-2.6	
July	3/ 11,001	11,103	10,796		+1.1	+0.9	-2.8	
August	3/ 11,006	11,107	10,807		+0.9	+0.9	-2.7	
September	3/ 11,015	11,126	10,825		+0.8	+1.0	-2.7	
October	3/ 11,031	11,138	10,821		+0.8	+1.0	-2.8	
November	3/ 11,042	11,142	10,823		+0.7	+0.9	-2.9	
December	3/ 11,047	11,113	10,814		+0.6	+0.6	-2.7	
Annual average	11,011	11,098	10,840		+1.0	+0.8	-2.3	

1/ Preliminary. 2/ Excludes milk sucked by calves. 3/ ERS derived data consistent with published official USDA quarterly estimates. No monthly data for an individual State or region are available. 4/ May not add because of rounding. 5/ Excludes heifers not yet fresh.

Table 3.--Milk production and factors affecting supply, selected years, 1970-84

Year	Milk cattle on farms, January 1			Milk cows on farms, average during year	Milk production		Average prices received by farmers per cwt		
	Milk cows and heifers that have calved	Milk cow replacements; heifers 500 pounds and over			Per cow	Total	All milk, wholesale	Milk eligible for fluid market	Milk, manufacturing grade
	Thousand		Number per 100 cows	Thousand	Pounds	Million pounds	Dollars		
1970	12,091	3,880	32.1	12,000	9,751	117,007	5.71	6.05	4.70
1971	11,909	3,843	32.3	11,839	10,015	118,566	5.87	6.21	4.85
1972	11,776	3,828	32.5	11,700	10,259	120,025	6.09	6.40	5.11
1973	11,622	3,872	33.3	11,413	10,119	115,491	7.20	7.46	6.30
1974	11,297	3,941	34.9	11,230	10,293	115,586	8.34	8.67	7.15
1975	11,220	4,087	36.4	11,139	10,360	115,398	8.75	9.02	7.63
1976	11,071	3,956	35.7	11,032	10,894	120,180	9.66	9.93	8.56
1977	10,998	3,887	35.3	10,945	11,206	122,654	9.72	9.96	8.70
1978	10,896	3,886	35.7	10,803	11,243	121,461	10.58	10.79	9.65
1979	10,790	3,932	36.4	10,734	11,492	123,350	12.03	12.23	11.09
1980	10,758	4,159	38.6	10,799	11,891	128,406	13.05	13.21	12.05
1981	10,849	4,342	40.0	10,898	12,183	132,770	13.76	13.94	12.73
1982	10,986	4,547	41.4	11,011	12,306	135,505	13.59	13.73	12.66
1983	11,047	4,545	41.1	11,098	12,585	139,672	13.57	13.72	12.63
1984	11,109	4,532	40.8	10,840	12,495	135,444	13.45	13.58	12.54

Year	Dairy ration cost		Milk cow cost		Grain and other concentrates fed to milk cows			Dairy pasture feed conditions, as percent of normal	Alfalfa hay prices received by farmers per ton	Utility cow prices per cwt
	Value per 100 pounds	Milk/feed price relationship 2/	Price received per head	Milk required to buy a cow	Total fed	Per cow	Per cwt of milk produced			
	Dollars	Pounds	Dollars	Cwt	Thousand tons	Pounds	Pounds	Percent	Dollars	
1970	3.28	1.53	332	58	24,870	3,979	42.4	81	24.70	21.32
1971	3.44	1.49	358	61	25,107	4,070	42.4	79	27.10	21.62
1972	3.52	1.52	397	65	25,162	4,298	41.9	80	31.45	25.21
1973	4.88	1.28	496	69	25,042	4,389	43.4	83	41.55	32.82
1984	6.23	1.22	500	60	24,586	4,384	42.6	75	52.58	25.56
1975	6.25	1.31	412	47	24,274	4,357	42.1	79	54.38	21.09
1976	6.30	1.37	477	49	25,083	4,545	41.7	70	60.81	25.31
1977	6.20	1.39	504	52	25,518	4,709	42.1	72	60.57	25.32
1978	6.08	1.53	675	64	26,018	4,803	42.8	76	52.25	36.79
1979	6.68	1.55	1,040	86	27,207	5,070	44.1	82	60.37	50.10
1980	7.42	1.48	1,190	91	28,433	5,260	44.2	70	72.00	45.73
1981	8.02	1.44	1,200	87	28,513	5,220	42.9	79	70.90	41.93
1982	7.45	1.54	1,110	82	29,661	5,380	43.7	83	73.73	39.96
1983	7.88	1.45	1,030	76	30,162	5,438	43.2	77	80.23	39.35
1984	8.16	1.42	895	67	28,464	5,253	42.0	74	80.15	39.81

1/ Preliminary. 2/ Pounds of 16-percent protein ration equal in value to 1 pound of milk.

Table 4.--Milk/16-percent protein dairy feed price ratio, by months, 1981-85 1/

Month	1981	1982	1983	1984	1985
	Pounds				
Jan.	1.39	1.55	1.59	1.33	1.58
Feb.	1.39	1.53	1.56	1.33	1.57
Mar.	1.41	1.53	1.55	1.34	1.55
Apr.	1.39	1.51	1.49	1.32	1.51
May	1.35	1.47	1.45	1.32	1.47
June	1.36	1.47	1.43	1.33	1.45
July	1.40	1.47	1.45	1.35	
Aug.	1.43	1.50	1.41	1.43	
Sept.	1.48	1.57	1.36	1.48	
Oct.	1.53	1.61	1.39	1.56	
Nov.	1.56	1.62	1.36	1.62	
Dec.	1.54	1.60	1.34	1.59	
Avg.	1.44	1.54	1.45	1.42	

1/ Pounds of 16-percent protein ration equal in value to 1 pound of milk.

Table 5.--Utility cow prices, Omaha, by months, 1982-85

Month	1982	1983	1984	1985
	Dollars per cwt			
January	36.64	36.94	33.26	39.00
February	38.11	40.92	39.69	42.79
March	39.41	42.36	44.01	43.16
April	41.26	43.04	42.88	42.30
May	43.40	42.98	42.17	41.97
June	42.73	42.26	42.16	39.38
July	42.52	41.14	41.48	
August	42.62	39.63	40.86	
September	41.52	37.75	39.20	
October	39.28	37.42	38.57	
November	36.58	34.14	36.86	
December	35.41	33.58	36.56	
Average	39.96	39.35	39.81	

Table 6.--Corn, soybean meal, and 16-percent protein dairy ration prices, 1983-85

Month	Corn, No. 2, St. Louis			Soybean meal, Decatur			16-percent dairy feed		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
	- - - $/bu. - - -			- - - $/ton - - -			- - - $/ton - - -		
January	2.52	3.41	2.86	179.3	201.9	135.2	175	205	177
February	2.79	3.31	2.84	177.1	184.4	125.3	177	201	174
March	2.99	3.55	2.86	177.3	196.4	125.9	175	199	172
April	3.24	3.61	2.88	186.8	190.0	117.3	182	199	171
May	3.24	3.58	2.81	185.8	187.4	111.5	184	197	170
June	3.27	3.57	2.79	175.5	174.4	110.3	184	195	168
July	3.39	3.43		189.3	157.6		182	192	
August	3.68	3.33		232.8	151.6		189	188	
September	3.60	3.09		233.6	144.9		198	184	
October	3.50	2.84		228.6	141.6		199	179	
November	3.53	2.77		224.7	135.2		205	177	
December	3.45	2.75		218.0	136.7		205	176	
Average 1/	3.27	3.27		200.7	166.8		188	191	

1/ Simple average of monthly prices.

Table 7.--Milk used and marketed by farmers, 1976-84

	1976	1977	1978	1979	1980	1981	1982	1983	1984 5/
					Billion pounds				
Used on farms where produced:									
Fed to calves 1/	1.6	1.5	1.5	1.4	1.4	1.4	1.5	1.5	2.3
As fluid milk or cream 2/	1.4	1.3	1.2	1.0	.9	.9	.8	.8	.8
Total on-farm use 3/	3.0	2.8	2.7	2.5	2.3	2.3	2.4	2.4	3.1
Milk marketed by farmers:									
Sold to plants and dealers	115.7	118.3	117.3	119.4	124.6	129.0	131.9	136.1	131.2
Sold directly to consumers 4/	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.2	1.2
Total milk marketed 3/	117.2	119.8	118.8	120.9	126.1	130.5	133.1	137.3	132.4
Total milk production 1/ 3/	120.2	122.7	121.5	123.4	128.4	132.8	135.5	139.7	135.4

1/ Excludes milk sucked by calves. 2/ Includes farm-churned butter. 3/ May not add due to rounding.
4/ By producers who sell only milk from their herds. Also includes milk produced by institutional herds.
5/ Preliminary.

Table 8.--Manufacturing grade milk marketed, selected States, selected years

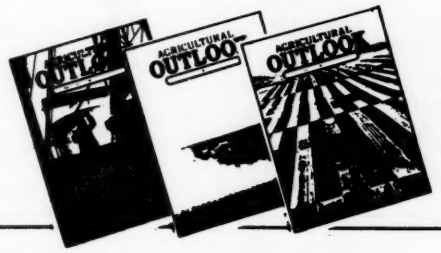
State	1973	1979	1980	1981	1982	1983	1984
				Billion pounds			
Wisconsin	7.3	6.6	6.4	6.3	6.1	6.1	6.0
Minnesota	5.7	4.1	3.9	3.9	3.8	4.1	3.7
Iowa	2.2	1.6	1.6	1.5	1.5	1.5	1.3
Missouri	1.0	0.7	0.7	0.6	0.6	0.5	0.5
South Dakota	1.1	1.0	1.1	1.1	1.1	1.1	1.0
Idaho	1.1	1.0	1.1	1.2	1.2	1.2	1.1
Nebraska	0.2	0.5	0.5	0.5	0.5	0.5	0.4
California	0.9	0.5	0.5	0.5	0.6	0.6	0.6
Kentucky	0.6	0.4	0.4	0.4	0.4	0.4	0.3
Illinos	0.7	0.5	0.5	0.5	0.5	0.5	0.5
Total U. S.	24.8	19.6	19.5	19.4	19.2	19.5	18.2

Table 9.—Milk prices received by farmers, by months, 1982-85

Month	All sold to plants				Manufacturing grade			
	1982	1983	1984	1985	1982	1983	1984	1985
	Dollars per cwt							
January	14.00	13.90	13.60	14.00	13.00	12.90	12.50	12.90
February	13.80	13.80	13.40	13.70	12.80	12.80	12.40	12.60
March	13.70	13.60	13.30	13.30	12.70	12.70	12.40	12.30
April	13.50	13.60	13.10	12.90	12.60	12.70	12.30	11.90
May	13.20	13.30	13.00	12.50	12.40	12.50	12.20	11.60
June	13.20	13.20	12.90	12.20	12.30	12.40	12.10	11.30
July	13.20	13.20	13.00		12.30	12.30	12.10	
August	13.30	13.30	13.20		12.30	12.20	12.20	
September	13.60	13.50	13.60		12.60	12.50	12.80	
October	13.80	13.80	14.00		12.90	12.90	13.10	
November	13.90	13.90	14.30		13.00	13.00	13.30	
December	13.90	13.70	14.00		13.00	12.70	13.10	
Average 1/	13.59	13.57	13.45		12.66	12.63	12.54	

1/ Simple average of reported monthly prices.

Monthly Analyses of Ag Economy...



Annual Subscription: $29.00 U.S., $36.25 foreign. A 25-percent discount is offered on orders of 100 copies or more to one address. Order from the superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Make check payable to Superintendent of Documents. Allow 6 to 8 weeks for delivery.

Table 10.--Cash receipts from farm marketings of milk and cream, by State and farm production region, 1978-84

State and region	1978	1979	1980	1981	1982	1983	1984 2/
				Million Dollars			
Maine	73.3	82.1	91.6	102.4	105.8	106.8	105.3
New Hampshire	39.2	43.3	46.8	49.8	52.4	54.5	51.6
Vermont	234.8	267.1	301.3	323.0	330.4	347.9	316.4
Massachusetts	67.3	73.8	79.7	86.0	89.1	90.9	83.9
Rhode Island	6.4	6.4	6.4	6.6	6.6	6.4	6.3
Connecticut	71.0	78.0	83.7	90.5	92.8	94.5	88.3
New York	1,075.6	1,243.3	1,404.0	1,502.1	1,494.0	1,566.0	1,508.0
New Jersey	59.0	61.9	66.0	69.5	68.3	69.9	65.4
Pennsylvania	877.7	1,030.8	1,164.8	1,282.6	1,301.7	1,330.9	1,305.7
Delaware	14.3	15.7	16.8	17.4	18.8	18.9	18.1
Maryland	171.7	188.9	205.2	220.8	219.5	222.9	212.2
NORTHEAST	2,690.3	3,091.3	3,466.3	3,750.4	3,779.4	3,909.6	3,761.2
Michigan	496.7	571.6	647.5	690.0	703.9	739.9	709.5
Wisconsin	2,127.0	2,507.3	2,770.1	3,007.6	3,007.7	3,075.8	3,007.9
Minnesota	880.3	1,026.2	1,137.7	1,306.7	1,333.0	1,402.0	1,290.3
LAKE STATES	3,504.6	4,105.1	4,591.3	5,008.3	5,037.6	5,217.7	5,007.7
Ohio	449.0	507.8	552.6	598.6	617.5	642.5	611.1
Indiana	229.8	264.5	283.1	310.4	312.8	316.9	305.8
Illinois	245.9	280.7	323.4	354.5	353.2	361.1	347.1
Iowa	386.7	432.2	489.6	527.1	513.2	518.0	473.0
Missouri	274.2	314.4	352.7	380.6	380.9	406.3	353.8
CORN BELT	1,585.6	1,799.6	2,001.4	2,171.2	2,177.6	2,244.8	2,090.8
North Dakota	81.6	92.3	106.7	121.0	123.1	131.9	121.8
South Dakota	144.7	171.1	203.9	225.4	227.4	234.0	212.9
Nebraska	125.9	146.1	162.7	183.6	174.2	184.2	157.9
Kansas	144.1	156.9	171.0	192.2	186.7	190.2	167.8
NORTHERN PLAINS	496.3	566.4	644.3	722.2	711.4	740.3	660.4
Virginia	202.7	235.6	259.6	281.0	282.9	284.9	269.7
West Virginia	35.3	40.9	44.6	47.5	46.6	49.1	49.1
North Carolina	169.8	191.1	220.7	239.6	240.5	245.1	238.8
Kentucky	219.8	248.9	272.6	298.0	307.8	314.5	262.6
Tennessee	210.0	244.1	287.3	308.5	304.6	296.3	269.7
APPALACHIAN	837.6	960.6	1,084.8	1,174.6	1,182.4	1,188.9	1,089.9
South Carolina	60.4	68.8	78.1	86.5	86.9	88.9	84.9
Georgia	148.5	171.2	188.4	202.3	200.9	200.1	184.7
Florida	250.2	286.8	317.4	347.6	343.4	346.3	304.4
Alabama	71.8	80.0	87.0	89.9	83.5	84.4	78.1
SOUTHEAST	530.9	606.8	670.9	726.3	714.7	719.7	652.1
Mississippi	91.3	101.3	111.6	123.0	127.3	124.3	117.8
Arkansas	76.8	86.7	95.4	109.6	114.8	118.5	110.5
Louisiana	120.3	132.6	140.6	146.3	141.4	137.3	127.7
DELTA STATES	288.4	320.6	347.6	378.9	383.5	380.1	356.0
Oklahoma	118.0	131.5	148.6	163.7	165.6	163.2	152.7
Texas	398.2	442.4	503.0	540.9	550.1	576.0	548.2
SOUTHERN PLAINS	516.2	573.9	651.6	704.6	715.7	739.2	700.9
Montana	30.2	33.3	38.4	42.4	42.8	45.0	44.9
Idaho	158.4	192.1	233.8	273.5	283.5	291.5	274.7
Wyoming	11.9	13.3	15.9	17.2	17.0	16.8	16.6
Colorado	96.3	106.7	116.4	134.3	138.7	141.8	136.5
New Mexico	52.7	65.5	84.3	102.7	123.8	132.2	140.3
Arizona	102.1	119.0	137.6	158.9	166.4	171.3	168.2
Utah	96.8	110.9	127.5	144.1	148.7	150.1	133.0
Nevada	19.0	22.3	27.2	29.2	29.3	31.1	33.2
MOUNTAIN	567.4	663.1	781.1	902.3	950.2	979.8	947.4
Washington	287.3	339.6	378.1	413.8	436.4	472.3	462.7
Oregon	114.6	113.3	151.5	166.8	178.5	188.0	179.4
California	1,227.6	1,453.3	1,770.3	1,943.2	1,941.2	1,944.8	1,986.4
Alaska	2.5	2.2	2.1	2.5	2.8	2.9	2.8
Hawaii	23.7	24.9	27.1	30.3	21.8	28.9	29.3
PACIFIC	1,655.7	1,953.3	2,329.1	2,556.6	2,580.7	2,636.9	2,660.6
UNITED STATES	12,672.8	14,640.7	16,568.5	18,095.2	18,233.5	18,756.9	17,927.1

1/ Totals may not add due to rounding. 2/ Preliminary.

Table 11.--Wholesale dairy product prices and indexes, by months, 1975-85

Year and month	Butter, Grade A, Chicago	Cheese, 40-lb blocks Wisconsin assembly points	Nonfat dry milk, Central States, high heat	Wholesale price index (all dairy products)	Fresh whole milk	Butter	Cheese	Ice cream
	- - - - Cents per lb. - - - -			- - - - - - - - - - - -		1967=100		- - - - - - - - - -
1975	79.38	86.61	62.99	155.8	129.7	119.3	192.2	139.4
1976	92.03	96.30	62.57	168.4	138.7	139.5	212.2	147.8
1977	98.42	96.82	66.38	173.4	141.3	147.9	215.3	157.4
1978	109.76	107.08	71.66	188.4	150.8	166.8	240.8	169.5
1979	122.43	123.77	80.08	211.2	169.8	185.6	269.6	188.7
1980	139.34	133.04	88.42	230.6	183.0	211.5	292.7	212.4
1981	147.99	139.44	93.11	245.6	194.4	225.6	309.4	232.8
1982	147.69	138.27	93.15	248.9	197.9	226.9	313.3	235.9
1983	147.30	138.28	93.19	250.6	199.7	226.5	314.1	246.5
1984								
January	140.44	135.79	90.75	248.4	199.9	218.8	307.5	240.4
February	141.25	135.47	90.75	248.4	199.5	219.2	307.6	242.5
March	142.11	135.88	90.75	248.8	199.6	220.2	308.3	243.6
April	142.94	135.88	90.75	248.9	199.4	220.2	308.4	245.6
May	142.92	135.88	90.75	248.9	199.3	221.3	308.8	244.9
June	150.04	136.02	90.75	249.6	199.6	227.3	308.7	244.2
July	155.55	136.71	90.75	251.4	199.4	242.1	310.1	248.8
August	150.61	138.59	90.75	251.2	199.7	227.1	313.2	246.0
September	158.12	144.29	90.75	255.0	201.4	241.3	318.3	251.3
October	158.12	143.78	90.75	256.4	203.3	243.0	318.7	249.7
November	158.12	139.72	91.75	257.4	206.0	243.3	315.2	248.7
December	145.55	137.50	91.50	255.9	202.2	221.7	314.8	249.0
Average	148.81	137.96	90.90	251.7	200.8	228.8	311.6	246.2
1985								
January	141.46	136.48	90.99	255.3	206.0	216.9	314.0	249.2
February	141.25	134.26	90.57	254.1	205.3	216.8	311.8	249.5
March	141.25	132.05	89.74	253.4	205.1	217.1	310.0	249.8
April	141.89	129.93	84.87	251.4	204.8	217.5	304.6	249.6
May	141.88	128.00	84.50	250.1	203.8	217.3	301.8	248.1

Table 12.--Retail price indexes, for all urban consumers, by months, 1978-85

Year and month	Consumer price index	All food	All dairy products	Fluid milk and cream	Whole milk	Other fluid items	Manufac-tured dairy products	Butter	Cheese	Frozen desserts	Other manufac-tured
	- - 1967=100 - -			12/77=100	1967=100	12/77=100	12/77=100	1967=100	- - - 12/77=100 - - -		
1978	195.4	211.4	185.6	104.8	171.7	104.5	105.0	179.4	104.8	104.7	104.4
1979	217.4	234.5	207.1	116.8	191.4	116.4	117.4	202.9	117.7	117.0	114.0
1980	246.8	254.6	227.4	127.0	208.4	126.3	130.6	228.0	129.5	132.8	126.4
1981	272.4	274.6	243.6	134.5	220.2	134.5	142.2	245.5	140.3	147.3	136.3
1982	289.1	285.7	247.0	135.4	221.4	135.6	145.6	251.1	143.9	150.4	140.2
1983	298.4	291.7	249.9	136.3	222.9	136.7	148.3	254.0	146.3	153.2	144.4
1984											
January	305.2	299.4	250.8	136.4	222.7	137.3	149.3	254.7	147.0	154.8	146.1
February	306.6	302.1	250.9	136.6	223.3	137.0	149.3	253.4	146.8	155.6	146.2
March	307.3	302.2	250.8	136.5	222.9	137.3	149.2	254.4	146.3	155.3	146.9
April	308.8	302.3	251.5	136.8	223.7	137.3	149.6	252.4	146.6	156.4	148.2
May	309.7	301.4	251.0	136.5	223.0	137.3	149.4	254.2	146.2	156.6	146.8
June	310.7	302.0	251.7	136.6	223.2	137.3	150.2	254.1	147.4	156.6	148.5
July	311.7	303.2	252.2	136.7	223.3	137.5	150.8	261.2	147.9	155.8	148.3
August	313.0	304.8	252.7	136.7	223.2	137.7	151.5	264.4	148.2	157.4	148.1
September	314.5	304.2	254.9	137.7	224.7	138.7	153.1	266.0	149.1	160.9	149.9
October	315.3	304.4	256.1	138.7	226.8	139.0	153.3	268.8	149.5	160.0	150.0
November	315.3	304.1	257.2	139.8	228.7	140.0	153.3	268.7	150.1	158.1	150.9
December	315.5	305.1	258.4	140.4	229.6	140.7	154.1	269.4	150.1	160.1	152.5
Average[1]	311.1	302.9	253.2	137.4	224.6	138.1	151.1	260.1	147.9	157.3	148.5
1985											
January	316.1	307.3	258.8	140.4	229.6	141.0	154.5	266.4	150.3	162.3	153.0
February	317.4	309.5	259.2	140.7	229.8	141.5	154.8	264.9	150.8	162.6	153.0
March	318.8	309.7	258.9	140.6	229.7	141.2	154.4	263.9	150.5	162.1	152.8
April	320.1	309.6	258.3	140.2	229.1	140.8	154.2	259.6	149.9	162.4	154.7
May	321.3	308.9	258.4	139.8	228.7	140.1	154.9	262.6	150.7	162.9	155.0

Table 13.--Retail dairy product prices, by months, 1984-85

Year and month	Milk, fresh, whole 1/	Milk, fresh, skim	Milk, fresh, lowfat	Butter, salted, Grade AA, sticks	Natural Cheddar cheese	American processed cheese	Ice cream, prepackaged, bulk, regular	Yogurt, natural fruit flavored
	-- $ per 1/2 gallon --			--- $ per pound -----			$ per 1/2 gallon	$ per 1/2 pint
1984								
January	1.124	.999	1.067	2.055	3.048	2.485	2.189	.522
February	1.122	.995	1.072	2.035	3.036	2.495	2.191	.517
March	1.121	1.000	1.068	2.057	3.044	2.493	2.171	.532
April	1.126	1.013	1.073	2.041	3.030	2.501	2.210	.542
May	1.124	1.005	1.074	2.058	3.026	2.472	2.203	.523
June	1.121	.999	1.067	2.054	3.058	2.502	2.193	.534
July	1.125	1.003	1.059	2.112	3.095	2.478	2.212	.529
August	1.118	1.018	1.054	2.136	3.068	2.503	2.232	.513
September	1.126	1.028	1.058	2.171	3.067	2.521	2.301	.524
October	1.132	1.021	1.058	2.180	3.088	2.536	2.259	.527
November	1.142	1.023	1.069	2.189	3.103	2.548	2.223	.530
December	1.142	1.041	1.082	2.201	3.120	2.534	2.231	.565
Average	1.127	1.012	1.067	2.107	3.065	2.506	2.218	.530
1985								
January	1.143	1.047	1.086	2.179	3.101	2.547	2.284	.563
February	1.144	1.047	1.082	2.160	3.093	2.511	2.291	.562
March	1.139	1.056	1.099	2.158	3.055	2.544	2.290	.569
April	1.141	1.055	1.090	2.136	3.060	2.525	2.291	.573
May	1.138	1.043	1.089	2.130	3.100	2.539	2.312	.576

1/ Vitamin fortified.

Table 14.--Production of selected manufactured dairy products, 1975-79

Item	Units	1975	1976	1977	1978	1979
Butter	Mil. lb.	983.8	978.6	1,085.6	994.3	984.6
American cheese	Mil. lb.	1,654.6	2,048.8	2,043.1	2,074.2	2,189.9
Other cheeese	Mil. lb.	1,156.8	1,271.4	1,315.5	1,445.5	1,527.3
Cottage cheese 1/	Mil. lb.	991.0	1,010.0	1,017.0	1,023.7	998.1
Canned milk	Mil. lb.	926.9	932.1	794.9	787.9	796.1
Dry whole milk	Mil. lb.	63.1	78.1	69.4	74.6	85.3
Ice cream	Mil. gal.	836.6	818.2	809.8	815.4	811.1
Total milkfat basis 2/	Mil. lb.	60,524	64,673	67,068	65,944	67,504
Nonfat dry milk	Mil. lb.	1,001.5	926.2	1,106.6	920.4	980.7

1/ Creamed and lowfat. 2/ Total reported manufactured products using unrounded data.

Table 15.--Production of selected manufactured dairy products, 1980-84

Item	Units	1980	1981	1982	1983	1984 1/
Butter	Mil. lb.	114.5	1,228.2	1,257.0	1,299.2	1,103.3
American cheese	Mil. lb.	2,375.8	2,642.3	2,752.3	2,927.7	2,648.2
Other cheeese	Mil. lb.	1,608.5	1,635.3	1,789.4	1,891.8	2,025.5
Cottage cheese 2/	Mil. lb.	1,004.4	981.7	966.4	958.4	961.6
Canned milk	Mil. lb.	724.7	757.9	734.9	694.2	647.7
Dry whole milk	Mil. lb.	827	92.7	102.2	111.2	119.6
Ice cream	Mil. gal.	829.8	832.4	852.1	881.5	883.5
Total milkfat basis 3/	Mil. lb.	73,327	77,916	80,583	83,992	77,292
Nonfat dry milk	Mil. lb.	1,160.7	1,314.3	1,400.5	1,499.9	1,158.9

1/ Preliminary. 2/ Creamed and lowfat. 3/ Total reported manufactured products using unrounded data.

Table 16.--Production of selected manufactured dairy products, 1984-85, with comparisons

Item	Jan.-May 1984	Jan.-May 1985 1/	Change
	Million pounds		Percent
Butter	551.9	556.8	+0.9
Cheese			
American	1,195.7	1,178.4	-1.4
Other	807.4	854.1	+5.8
Creamed cottage 2/	409.2	410.9	+.4
Canned milk	274.0	259.2	-5.4
Dry whole milk	51.8	60.9	+17.6
Ice cream (gal)	355.9	348.3	-2.1
Milk equivalent 3/	33,918	34,254	+1.0
Nonfat dry milk	552.5	549.9	-.5

1/ Preliminary. 2/ Creamed and lowfat.
3/ Total reported manufactured products.

Table 17.--Wisconsin out-of-State milk shipments

Month	1983 1/		1984 1/		1985 1/	
	Loads 2/	Volume 3/	Loads 2/	Volume 3/	Loads 2/	Volume 3/
	Number	Thousand pounds	Number	Thousand pounds	Number	Thousand pounds
January	13	611	44	2,156	97	4,753
February	7	329	42	2,058	89	4,361
March	1	47	64	3,136	65	3,185
April	1	47	75	3,675	73	3,577
May	9	423	35	1,715	17	833
June	3	141	148	7,252	0	0
July	28	1,372	71	3,479		
August	62	3,038	236	11,564		
September	258	12,642	484	23,716		
October	57	2,793	486	23,814		
November	54	2,646	447	21,903		
December	50	2,450	254	12,446		
Total	543	26,539	2,386	116,914		

1/ Changes in marketing practices in the Chicago market and adjacent Federal order markets may affect the comparability of these data. 2/ Includes out-of-State skim milk shipments. 3/ Average weight of load increased from 47,000 pounds to 49,000 after July 1, 1983.

Table 18.--Commercial disappearance: Total milk, 1970-80 1/

Item	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
						Billion pounds					
Production	117.0	118.6	120.0	115.5	115.6	115.4	120.2	122.7	121.5	123.3	128.4
Farm use	4.0	3.8	3.5	3.3	3.2	3.1	3.0	2.8	2.7	2.5	2.3
Marketings	113.0	114.8	116.5	112.1	112.4	112.3	117.2	119.8	118.8	120.9	126.1
Beginning commercial stocks	3.8	3.7	3.6	3.5	4.7	5.6	3.7	5.3	4.9	4.5	5.4
Imports	1.9	1.3	1.7	3.9	2.9	1.7	1.9	2.0	2.3	2.3	2.1
Total supply	118.7	119.9	121.7	119.5	120.0	119.6	122.9	127.1	126.0	127.6	133.6
Ending commercial stocks	3.7	3.6	3.5	4.7	5.6	3.7	5.3	4.9	4.5	5.4	5.8
Net removals	5.8	7.3	5.3	2.2	1.3	2.0	1.2	6.1	2.7	2.1	8.8
Commercial disappearance (actual)	109.2	109.0	112.9	112.6	113.1	113.8	116.3	116.1	118.8	120.1	119.0
Percent change 2/	+1.5	-.2	3/ +3.3	3/ -0.0	+.5	+.6	3/ +1.9	3/ +0.1	+2.3	+1.1	3/ -1.2

1/ Milkfat basis. Totals may not add because of rounding. 2/ From year earlier, using unrounded data. 3/ On a daily average basis.

Table 19.--Commercial disappearance: Total milk, annual and quarters, 1981-85 1/

Item	1981	1982	1983					1984					1985 2/
			Quarters					Quarters					Quarters
			I	II	III	IV	Total	I	II	III	IV	Total	I
						Billion pounds							
Production	132.8	135.5	34.2	36.8	34.9	33.7	139.7	34.0	35.6	33.5	32.4	135.4	33.6
Farm use	2.3	2.4	.6	.6	.6	.6	2.4	.8	.8	.8	.8	3.1	.8
Marketings	130.5	133.1	33.6	36.2	34.3	33.1	137.3	33.2	34.8	32.7	31.6	132.4	32.8
Beginning commercial stocks	5.8	5.4	4.6	5.2	5.3	5.2	4.6	5.2	5.3	5.6	5.2	5.2	4.9
Imports	2.3	2.5	.6	.5	.6	.9	2.6	.6	.6	.7	.8	2.7	.6
Total supply	138.5	141.0	38.8	42.0	40.2	39.2	144.5	39.0	40.8	39.0	37.6	140.3	38.4
Ending commercial stocks	5.4	4.6	5.2	5.3	5.2	5.2	5.2	5.3	5.6	5.2	4.9	4.9	5.0
Net removals	12.9	14.3	5.6	5.8	3.1	2.3	16.8	4.5	2.8	.8	.6	8.6	4.1
Commercial disappearance (actual)	120.3	122.1	28.0	30.9	32.0	31.6	122.5	29.2	32.4	33.0	32.1	126.7	29.3
Percent change 3/	4/ +1.3	+1.5	-2.1	+0.3	+0.7	+2.0	+0.3	4/ +2.9	+5.0	+3.3	+1.5	4/ +3.2	4/ +1.8

1/ Milkfat basis. Totals may not add because of rounding. 2/ Preliminary. 3/ From year earlier, using unrounded data. 4/ On a daily average basis.

Table 20.--Commercial disappearance: Selected manufactured dairy products, 1970-85 1/

Year and quarter	Butter 2/	Cheese		Nonfat dry milk	Canned milk	Frozen products 4/
		American 3/	Other			
	Million pounds					Million gallons
1970	898.2	1,401.9	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,280.0
1975	950.7	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	775.2	1,167.6
1978	903.5	2,064.7	1,655.5	658.4	776.1	1,173.5
1979	895.0	2,113.1	1,730.4	603.1	773.7	1,152.1
1980	878.8	2,023.9	1,827.9	538.9	732.5	1,166.9
1981	869.2	2,147.9	1,875.6	464.1	750.4	1,167.7
1982	897.3	2,166.8	2,044.6	447.7	715.3	1,178.2
1983-1st Qtr.	209.5	466.9	494.6	109.6	160.8	264.2
2nd Qtr.	198.6	570.7	508.3	106.4	159.0	340.1
3rd Qtr.	217.0	500.2	521.1	122.4	144.5	368.4
4th Qtr.	256.6	545.4	610.4	121.6	221.4	251.5
Total	881.7	2,083.3	2,134.3	459.9	685.8	1,224.2
1984-1st Qtr.	194.0	545.1	530.9	124.4	144.1	271.1
2nd Qtr.	241.3	572.8	559.8	109.6	136.3	350.6
3rd Qtr.	215.6	564.4	582.9	141.6	143.6	355.3
4th Qtr.	251.5	571.3	637.2	120.1	219.7	253.2
Total	902.3	2,253.6	2,310.9	496.0	643.6	1,230.4
1985-1st. Qtr. 5/	205.7	515.2	558.5	104.7	125.7	260.7

1/ Totals may not add because of rounding. 2/ Imports include butter-equivalent of butteroil. 3/ Imports include Colby cheese; stocks do not include processed cheese. 4/ Excludes Mellorine. 5/ Preliminary.

Table 21.--Dairy products: Per capita civilian consumption, 1970-84

Year	Fluid milk and cream 1/	Butter	Cheese		Cottage cheese	Evaporated and condensed			Frozen products					Dry milk products			
			Whole and part skim milk 2/			Canned, whole milk	Bulk, whole milk	Bulk and canned, skim milk	Ice cream	Ice milk	Sherbet	Other frozen dairy products	Mello-rine	Dry whole milk	Non-fat dry milk	Dry butter-milk	Dry whey 3/
			American	Other													
	Pounds																
1970	277	5.3	7.1	4.4	5.2	5.9	1.2	5.0	17.6	7.8	1.6	0.2	1.2	0.2	5.3	0.2	0.9
1971	275	5.1	7.4	4.7	5.4	5.7	1.1	5.1	17.5	7.7	1.6	.2	1.1	.2	5.3	.3	1.0
1972	276	4.9	7.8	5.3	5.5	5.1	1.2	4.7	17.3	7.7	1.6	.3	1.1	.1	4.6	.2	1.7
1973	272	4.8	7.9	5.7	5.3	4.8	1.1	4.3	17.3	7.6	1.6	.3	.9	.1	5.3	.2	1.8
1974	262	4.5	8.6	6.0	4.7	4.4	1.2	3.5	17.4	7.7	1.5	.3	.8	.1	4.2	.2	2.0
1975	267	4.7	8.2	6.1	4.7	3.9	1.4	3.6	18.5	7.7	1.5	.3	.7	.1	3.3	.2	2.2
1976	264	4.3	9.0	6.7	4.7	3.7	1.3	3.6	17.9	7.3	1.5	.3	.5	.2	3.5	.2	2.4
1977	260	4.3	9.3	6.8	4.7	3.2	1.1	3.9	17.5	7.8	1.5	.3	.4	.2	3.3	.3	2.4
1978	257	4.4	9.6	7.4	4.7	3.1	1.1	3.5	17.4	7.7	1.4	.4	.4	.3	3.1	.2	2.5
1979	253	4.5	9.6	7.6	4.5	3.0	1.1	3.4	17.1	7.3	1.3	.3	.3	.3	3.3	.2	2.7
1980	250	4.5	9.7	7.9	4.5	2.8	1.0	3.3	17.6	7.2	1.3	.3	.3	.3	3.0	.2	2.7
1981	246	4.3	10.3	8.1	4.4	2.9	1.2	3.2	17.2	7.0	1.3	.6	.2	.2	2.6	.2	2.8
1982	243	4.6	11.5	8.6	4.2	2.8	1.3	3.0	17.5	6.7	1.3	.7	.2	.1	2.7	.2	2.9
1983	244	5.1	11.6	9.0	4.2	2.7	1.1	3.1	17.9	7.0	1.3	.6	.2	.1	3.0	.2	3.1
1984 4/	245	5.0	12.0	9.7	4.2	2.5	1.3	3.7	18.0	7.2	1.3	.6	.2	.1	2.4	.2	3.2

1/ Product pounds of commercial sales and on-farm consumption. Commercial sales include whole milk, lowfat milk, skim milk, buttermilk, flavored milk and drinks, cream, milk-cream mixtures, sour cream and dips, eggnog and yogurt. 2/ Excludes cottage cheese. 3/ Includes modified dry whey products beginning 1975. 4/ Preliminary or estimated.

Table 22.--Per capita civilian consumption of selected cheese varieties, 1970-84

Year	Natural equivalent of cheese and cheese products												
	American			Italian							Miscellaneous		
	Cheddar	Other 1/	Total	Provolone	Romano	Parmesan	Mozzarella	Ricotta	Other	Total	Swiss 2/	Brick	Muenster
	Pounds												
1970	5.86	1.22	7.08	.23	.15	.17	1.21	.25	.08	2.09	.90	.10	.17
1971	6.00	1.42	7.42	.22	.14	.20	1.40	.28	.07	2.31	.95	.11	.19
1972	6.10	1.68	7.78	.24	.17	.23	1.59	.32	.08	2.63	1.08	.11	.22
1973	6.16	1.77	7.93	.27	.16	.19	1.79	.34	.09	2.84	1.08	.11	.22
1974	6.38	2.18	8.56	.28	.15	.25	1.88	.34	.09	2.99	1.21	.11	.23
1975	6.09	2.15	8.24	.28	.23	.17	2.14	.38	.07	3.27	1.11	.09	.24
1976	6.52	2.47	8.98	.32	.17	.28	2.34	.41	.08	3.60	1.26	.09	.26
1977	6.86	2.44	9.29	.35	.16	.27	2.49	.41	.09	3.77	1.22	.07	.25
1978	7.00	2.59	9.60	.37	.19	.28	2.72	.45	.11	4.12	1.35	.08	.27
1979	6.97	2.63	9.61	.41	.16	.32	2.84	.47	.08	4.28	1.36	.06	.29
1980	6.90	2.78	9.68	.42	.15	.28	3.05	.47	.10	4.47	1.34	.07	.31
1981	7.15	3.13	10.28	.45	.14	.31	3.01	.50	.09	4.50	1.28	.06	.30
1982	8.91	2.59	11.50	.47	.17	.33	3.32	.48	.12	4.89	1.31	.06	.31
1983	9.13	2.49	11.62	.50	.16	.33	3.71	.54	.09	5.33	1.26	.06	.31
1984 4/	9.73	2.29	12.02	.55	.18	.36	4.06	.58	.09	5.82	1.25	.07	.32

Year	Natural equivalent--continued						Product-weight form				
	Miscellaneous--continued					Total	Processed				
	Cream and Neufchatel	Blue 5/	Edam and Gouda	Other	Total		Cheese	Foods and spreads	Total	Natural	Total 6/
	Pounds										
1970	0.62	0.14	0.11	0.27	2.31	11.48	3.3	2.32	5.6	7.0	12.6
1971	.63	.14	.10	.28	2.40	12.13	3.6	2.3	5.9	7.4	13.3
1972	.64	.16	.11	.37	2.69	13.10	3.4	2.7	6.0	8.2	14.2
1973	.67	.17	.12				3.3	2.7	6.0	8.9	14.9
1974	.71	.16	.11				3.4	2.9	6.4	9.5	15.9
1975	.75	.15	.11	.41	2.86	14.37	3.3	3.4	6.7	9.2	15.9
1976	.78	.18	.11	.37	3.05	15.63	3.8	2.6	6.5	10.5	17.0
1977	.81	.17	.11	.42	3.05	16.11	3.8	3.3	7.1	10.6	17.7
1978	.90	.19	.12	.31	3.22	16.94	3.7	3.3	7.0	11.5	18.5
1979	.95	.17	.13	.36	3.32	17.21	3.7	3.1	6.8	11.9	18.7
1980	1.01	.17	.13	.44	3.47	17.62	3.8	3.1	7.0	12.2	19.2
1981	1.06	.16	.15	.56	3.57	18.35	3.6	3.2	6.7	13.2	19.9
1982	1.14	.16	.19	.58	3.75	20.14	4.5	3.3	7.8	13.9	21.7
1983	1.16	.16	.18	.54	3.67	20.62	4.9	3.4	8.3	14.1	22.4
1984 4/	1.18	.17	.19	.68	3.86	21.70	4.5	3.3	7.8	15.5	23.3

1/ Includes colby, washed curd, stirred curd, Monterey, and jack. 2/ Includes imports of Gruyere and Emmenthaler. 3/ Not available. 4/ Preliminary. 5/ Includes Gorgonzola. 6/ Total product-weight is greater than natural equivalent because processed cheese and cheese food is made from natural cheese and other dairy products. Numbers may not add due to rounding.

Table 23.--Factors influencing and indicative of the demand for milk and dairy products, 1965-84

Year	Total population July 1 (including armed forces overseas)	Total civilian employment	Per capita disposable income		Civilian per capita disappearance				Retail price indexes		
			Current	Deflated by consumer price index 1/	Milk-equivalent	Milk solids		Margarine	Consumer price	All foods	Dairy products
					Fat basis	Milk-fat	Solids-not-fat				
	-- Million --		-- Dollars --		-------- Pounds -------				----1967=100 ----		
1965	194.3	71.1	2,448	2,590	620	22.9	40.6	9.9	94.5	94.4	90.0
1966	196.6	72.9	2,613	2,688	604	22.3	40.3	10.5	97.2	99.1	95.8
1967	198.7	74.4	2,757	2,757	581	21.4	39.5	10.5	100.0	100.0	100.0
1968	200.7	75.9	2,956	2,837	577	21.2	39.7	10.8	104.2	103.6	103.3
1969	202.7	77.9	3,152	2,871	569	20.9	39.5	10.8	109.8	108.9	106.7
1970	205.1	78.7	3,390	2,915	561	20.6	39.7	11.0	116.3	114.9	111.8
1971	207.7	79.4	3,620	2,984	556	20.4	39.7	11.1	121.3	118.4	115.3
1972	209.9	82.2	3,860	3,081	558	20.5	39.4	11.3	125.3	123.5	117.1
1973	211.9	85.1	4,315	3,242	551	20.2	39.5	11.2	133.1	141.4	127.9
1974	213.9	86.8	4,667	3,160	539	19.8	37.9	11.2	147.7	161.7	151.9
1975	216.0	85.8	5,075	3,148	540	19.8	37.5	11.1	161.2	175.4	156.6
1976	218.0	88.8	5,477	3,212	540	19.8	38.2	12.0	170.5	180.8	169.3
1977	220.2	92.0	5,965	3,286	542	19.8	37.6	11.4	181.5	192.2	173.9
1978	222.6	96.0	6,621	3,388	545	20.0	37.3	11.3	195.4	211.4	185.6
1979	225.1	98.8	7,331	3,372	548	20.1	37.2	11.3	217.4	234.5	207.1
1980	227.7	99.3	8,032	3,254	544	19.9	36.4	11.4	246.8	254.6	227.4
1981	230.0	100.4	8,906	3,269	542	19.8	36.3	11.2	272.4	274.6	243.6
1982	232.3	99.5	9,385	3,246	560	20.4	36.9	11.1	289.1	285.7	247.0
1983	234.5	100.8	9,977	3,343	576	20.9	37.8	10.5	298.4	291.7	249.9
1984 2/	236.7	105.0	10,877	3,496	582	21.1	37.2	10.2	311.1	302.9	253.2

1/ 1967 dollars. 2/ Preliminary. 3/ Estimated. R = Revised series.

Table 24.--Use of market supply of milk, 1975-84

Item	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984 1/
	Billion pounds (milk equivalent)									
Fluid use	51.1	51.5	51.4	51.2	51.4	50.9	50.2	49.3	49.7	50.6
Butter 2/	19.9	51.5	21.9	19.7	19.4	22.8	24.6	25.0	25.8	21.5
Cheese										
American	16.5	20.6	20.5	20.7	21.9	23.8	26.2	27.5	29.3	26.4
Other	7.4	8.2	8.4	9.2	9.7	10.2	10.3	11.4	11.7	12.3
Creamed cottage cheese	1.0	1.1	1.1	1.1	1.0	1.0	1.0	1.0	.9	.9
Evap. & condensed milk 3/	2.7	2.5	2.4	2.3	2.3	2.1	2.3	2.2	2.2	2.1
Dry whole milk	.5	.6	.5	.5	.6	.6	.7	.8	.8	.9
Frozen dairy products, net	11.9	11.6	11.7	11.7	11.7	11.9	12.0	12.1	12.6	12.7
Other factory products	.7	.7	.7	.7	.9	.9	.8	.7	.7	.5
Total factory products 4/	60.5	64.7	67.1	65.9	67.5	73.3	77.9	80.6	84.0	77.3
Miscellaneous 5/	.9	1.3	1.6	2.1	2.3	2.1	2.5	3.5	3.9	4.7
Market supply of milk 6/	115.6	120.4	122.9	121.9	123.6	128.6	133.0	135.8	140.0	135.7

1/ Preliminary. 2/ Excludes milk equivalent of whey cream, includes milk equivalent of residual cream from fluid and other uses. 3/ Canned and bulk. 4/ May not add due to rounding. 5/ Minor miscellaneous uses and any inaccuracies of independently determined use items. 6/ Milk marketed by farmers, net imports of ingredients such as frozen cream, butterfat-sugar mixtures and "ice cream", and net change in storage cream.

Table 25.--Milk: Supply and utilization of all dairy products, 1970-84 1/

Year	Supply				Utilization							
	Production	Imports	Beginning stocks		Total	Total use	Exports and shipments		Domestic disappearance			
			Commercial	Government			Commercial 2/	USDA 3/	Fed to calves	Military	Food use Civilian Total	consumption Per capita
						Million pounds						Pounds
1970	117,007	1,874	3,798	1,447	124,126	118,323	919	41	1,702	2,419	113,212	561
1971	118,566	1,346	3,705	2,098	125,715	120,611	1,063	1,963	1,635	2,031	113,919	556
1972	120,025	1,694	3,565	1,539	126,823	121,325	1,263	884	1,624	1,671	115,883	558
1973	115,491	3,860	3,493	2,005	124,849	119,641	1,213	79	1,584	1,257	115,508	551
1974	115,586	2,923	4,732	476	123,717	117,831	1,133	25	1,558	1,137	113,978	539
1975	115,398	1,669	5,576	310	122,953	119,110	1,026	20	1,566	1,075	115,423	540
1976	120,180	1,943	3,719	124	125,966	120,257	1,004	23	1,567	1,013	116,650	540
1977	122,654	1,968	5,299	410	130,331	121,705	963	29	1,541	996	118,176	542
1978	121,461	2,310	4,916	3,710	132,397	123,668	927	51	1,497	977	120,216	545
1979	123,350	2,305	4,475	4,254	134,384	125,785	982	38	1,442	1,163	122,160	548
1980	128,406	2,109	5,419	3,180	139,114	126,155	932	56	1,395	1,067	122,705	544
1981	132,770	2,329	5,752	7,207	148,058	129,680	3,619	67	1,418	1,019	123,494	542
1982	135,505	2,477	5,398	12,980	156,360	136,306	3,946	644	1,521	1,369	128,816	560
1983	139,672	2,616	4,603	15,451	162,342	139,696	1,092	1,608	1,527	1,307	133,870	576
1984 4/	135,444	2,741	5,234	17,412	160,831	144,127	822	2,749	2,250	1,361	136,408	582

1/ Milk equivalent, fat-solids basis. 2/ Includes sales for dollars and government-to-government sales. 3/ Includes P.L. 480 and AID programs. 4/ Preliminary.

Table 26.--Milk solids in all dairy products: Production and disposition, 1970-84

Year	Production 1/	Sold by farmers	Civilian disposition				
			Consumed on farms where produced 2/	USDA donations 3/	Sales 4/	Total	Per capita
	Million pounds						Pounds
	Milkfat						
1970	4,284	4,137	80	158	3,912	4,150	20.6
1971	4,344	4,207	77	170	3,927	4,174	20.4
1972	4,410	4,280	70	150	4,033	4,253	20.5
1973	4,225	4,102	65	137	4,033	4,235	20.2
1974	4,238	4,121	60	55	4,070	4,185	19.8
1975	4,240	4,127	55	84	4,102	4,241	19.8
1976	4,402	4,294	51	17	4,211	4,279	19.8
1977	4,481	4,378	47	109	4,158	4,314	19.8
1978	4,455	4,357	43	85	4,284	4,412	20.0
1979	4,511	4,424	38	88	4,351	4,477	20.1
1980	4,692	4,602	34	158	4,301	4,493	19.9
1981	4,836	4,749	32	136	4,336	4,504	19.8
1982	4,950	4,860	31	271	4,481	4,683	20.4
1983	5,105	5,025	31	436	4,388	4,855	20.9
1984 5/	4,964	4,845	30	409	4,498	4,937	21.1
	Milk solids-not-fat						
1970	10,063	9,626	189	153	7,679	8,021	39.7
1971	10,197	9,797	182	167	7,786	8,135	39.7
1972	10,334	9,967	165	133	7,875	8,173	39.4
1973	9,932	9,592	152	69	8,065	8,286	39.5
1974	9,940	9,573	141	62	7,807	8,010	37.9
1975	9,936	9,672	129	62	7,832	8,023	37.5
1976	10,335	10,081	118	32	8,094	8,244	38.2
1977	10,536	10,283	110	71	8,025	8,206	37.6
1978	10,446	10,217	100	73	8,046	8,219	37.3
1979	10,608	10,395	89	65	8,141	8,295	37.2
1980	11,030	10,829	81	101	8,041	8,223	36.4
1981	11,405	11,207	76	98	8,098	8,272	36.3
1982	11,640	11,437	72	195	8,199	8,466	36.9
1983	12,012	11,808	72	290	8,428	8,790	37.8
1984 5/	11,648	11,384	71	189	8,457	8,714	37.2

1/ Quantities produced and used, estimated by applying the percentage of milkfat and solids-not-fat in each product to the amount of products. 2/ Fluid milk and cream and farm-churned butter. 3/ Butter, cheese, evaporated milk, nonfat dry milk, and dry whole milk for welfare purposes, institutions, and the school lunch program. 4/ Includes special milk program. 5/ Preliminary.

Table 27.--Selected dairy products: Supply and utilization, 1970-84

Year and item	Supply				Utilization					
	Beginning stocks	Production	Imports	Total supply	Foreign		Domestic			Ending stocks
					Exports	Shipments 1/	Military	Civilian use 2/	Total	
	Million pounds									
Butter 4/										
1970	89	1,143	2	1,234	2	7	45	1,061	1,115	119
1971	119	1,147	2	1,268	93	6	32	1,040	1,171	97
1972	97	1,102	2	1,201	44	10	23	1,017	1,094	107
1973	107	919	56	1,082	4	13	9	999	1,025	57
1974	57	962	2	1,021	1	6	9	956	972	49
1975	49	984	2	1,035	1	2	9	1,012	1,024	11
1976	11	979	2	992	1	3	7	934	945	47
1977	47	1,086	2	1,135	2	2	5	941	950	185
1978	185	994	2	1,181	1	4	3	966	974	207
1979	207	985	2	1,194	1	4	6	1,005	1,016	178
1980	178	1,145	2	1,325	1	2	5	1,012	1,020	305
1981	305	1,228	3	1,536	119	2	4	982	1,107	429
1982	429	1,257	3	1,689	151	2	20	1,050	1,222	467
1983	467	1,299	3	1,769	76	1	16	1,177	1,270	499
1984 3/	499	1,103	3	1,605	113	2	16	1,165	1,295	310
American cheese										
1970	265	1,423	16	1,704	4	12	8	1,431	1,450	254
1971	254	1,518	17	1,789	4	16	7	1,520	1,547	242
1972	242	1,652	15	1,909	4	17	5	1,614	1,640	269
1973	269	1,678	28	1,975	4	16	4	1,661	1,685	290
1974	290	1,862	112	2,264	5	24	3	1,881	1,843	421
1975	421	1,660	16	2,097	5	19	3	1,762	1,789	308
1976	308	2,054	14	2,376	6	16	4	1,938	1,964	412
1977	412	2,047	16	2,475	7	12	7	2,026	2,052	423
1978	423	2,079	18	2,520	4	12	9	2,116	2,141	379
1979	379	2,194	18	2,591	5	15	21	2,143	2,184	407
1980	407	2,381	18	2,806	5	13	14	2,183	2,215	591
1981	591	2,648	20	3,259	4	12	10	2,344	2,370	889
1982	889	2,759	18	3,666	22	15	13	2,645	2,684	982
1983	982	2,932	22	3,936	29	9	16	2,698	2,774	1,162
1984 3/	1,162	2,651	24	3,837	29	12	16	2,819	2,876	961
Other cheese										
1970	52	773	145	970	3	5	6	886	900	70
1971	70	856	119	1,045	3	6	5	966	980	65
1972	65	952	164	1,181	3	6	5	1,105	1,119	62
1973	62	1,008	202	1,272	3	7	5	1,188	1,204	68
1974	68	1,075	204	1,347	3	4	7	2,260	1,274	73
1975	73	1,152	163	1,388	4	5	7	1,310	1,327	61
1976	61	1,267	193	1,521	3	10	3	1,438	1,454	67
1977	67	1,311	194	1,572	3	16	2	1,487	1,508	64
1978	64	1,441	224	1,729	6	22	2	1,621	1,651	78
1979	78	1,523	230	1,831	7	20	3	1,695	1,725	106
1980	106	1,603	213	1,922	8	20	2	1,793	1,823	99
1981	99	1,629	228	1,956	8	21	2	1,838	1,869	87
1982	87	1,782	252	2,121	26	22	2	1,988	2,038	83
1983	83	1,887	265	2,235	10	26	2	2,094	2,130	105
1984 3/	105	2,023	282	2,410	8	29	2	2,269	2,309	101
Evaporated and condensed milk 5/										
1970	150	1,413	3	1,566	50	63	6	1,432	1,450	116
1971	116	1,492	3	1,611	68	56	5	1,393	1,522	89
1972	89	1,435	2	1,526	55	72	5	1,513	1,445	81
1973	81	1,338	3	1,422	43	58	4	1,248	1,353	69
1974	69	1,285	3	1,357	43	58	2	1,175	1,278	79
1975	79	1,218	1	1,298	54	64	2	1,119	1,239	59
1976	59	1,203	1	1,263	49	76	0	1,067	1,192	71
1977	71	1,039	1	1,111	34	62	1	939	1,036	75
1978	75	1,013	1	1,089	37	81	2	899	1,019	70
1979	70	1,035	0	1,105	42	73	2	911	1,028	77
1980	77	945	7/	1,022	43	70	3	854	970	52
1981	52	1,024	5	1,081	35	68	1	932	1,035	46
1982	46	1,028	7	1,081	19	84	1	925	1,028	53
1983	52	965	11	1,028	6	73	1	903	980	48
1984 3/	53	962	10	1,010	8	79	1	880	968	42
Nonfat dry milk 6/										
1970	222	1,444	2	1,668	416	16	7	1,079	1,530	138
1971	138	1,418	2	1,558	358	17	5	1,083	1,468	90
1972	90	1,223	2	1,315	282	23	5	955	1,270	45
1973	45	917	267	1,229	18	19	1	1,113	1,154	75
1974	75	1,020	115	1,210	9	18	1	884	916	294
1975	294	1,001	2	1,297	113	6	1	703	828	469
1976	469	926	2	1,397	126	8	0	764	911	486
1977	486	1,107	2	1,595	156	8	0	729	917	678
1978	678	920	2	1,600	261	9	1	689	1,015	585
1979	585	909	2	1,496	185	12	1	739	1,011	485
1980	485	1,161	5	1,651	289	9	11	674	1,064	587
1981	587	1,314	3	1,904	344	5	10	605	1,014	890
1982	890	1,401	2	2,293	318	12	10	611	1,011	1,282
1983	1,282	1,500	2	2,784	638	8	10	708	1,389	1,395
1984 3/	1,395	1,159	2	2,556	658	16	10	553	1,324	1,232

1/ To U.S. territories. 2/ Includes that fed to animals or wasted where applicable. 3/ Preliminary. 4/ Includes butter-equivalent of butteroil. 5/ Unskimmed includes both bulk and case goods. 6/ Human food only. 7/ Less than 50,000 pounds.

Table 28.--U.S. dairy product ending stocks, annual and quarters, 1970-85

	Commercial						Government				
	Butter	American cheese	Other cheese	Canned milk	Nonfat dry milk	Milk equivalent 1/	Butter 2/	American cheese 3/	Canned milk	Nonfat dry milk	Milk equivalent 1/
	Million pounds										
1970	19.7	252.7	70.5	115.7	95.3	3,705	99.1	1.3	0.1	42.6	2,098
1971	26.2	235.6	65.4	88.6	77.0	,565	70.7	6.1	0.2	12.5	1,539
1972	11.1	269.3	62.0	74.7	37.9	3,492	96.4	5/	5.8	6.9	2,005
1973	23.5	289.9	67.5	69.2	74.5	4,732	22.8	5/	5/	.1	476
1974	34.7	419.8	73.1	79.2	134.6	5,576	14.5	1.1	5/	158.6	310
1975	5.8	305.7	60.8	58.6	41.1	3,710	5.0	2.0	5/	421.8	124
1976	28.0	409.8	67.1	70.6	98.8	5,299	19.1	1.6	0.1	386.6	410
1977	34.2	361.5	64.0	75.2	60.7	4,916	150.7	60.5	5/	617.2	3,710
1978	15.2	349.1	78.4	70.3	40.1	4,475	191.8	29.7	5/	545.0	4,254
1979	25.2	403.7	105.6	76.7	92.6	5,419	152.6	2.8	0.3	392.7	3,180
1980	36.5	422.8	99.3	51.8	85.0	5,752	268.2	168.6	1.2	501.7	7,207
1981	47.3	373.8	86.6	46.0	86.7	5,398	381.9	515.4	0.8	803.0	12,980
1982	28.1	334.7	82.8	51.9	93.3	4,603	438.7	646.8	1.0	1,188.7	15,451
1983-1st	29.7	380.4	99.9	48.4	81.4	5,189	499.3	680.0	0.7	1,224.3	17,032
2nd	31.2	374.4	113.5	75.7	91.7	5,316	558.5	725.4	0.9	1,309.7	18,702
3nd	31.1	359.7	107.4	94.1	69.7	5,156	521.2	847.5	0.7	1,349.4	19,138
4th	35.8	368.2	104.9	46.7	74.6	5,234	463.5	793.3	1.0	1,320.3	17,412
1984-1st	44.2	364.6	100.2	52.8	58.9	5,348	485.2	834.0	1.8	1,362.1	18,262
2nd	46.1	374.2	104.3	89.7	74.5	5,610	470.6	809.8	1.6	1,346.7	17,722
3rd	39.6	346.3	97.0	102.9	52.7	5,168	386.7	767.8	1.1	1,282.4	15,573
4th	37.1	339.7	101.4	41.7	61.1	4,937	259.5	620.8	0.3	1,170.6	11,492
1985-1st 4/	37.7	338.1	101.3	50.2	63.8	4,970	254.0	535.9	0.5	1,031.3	10,540
May	44.3	343.4	107.2	83.3	79.0	5,257	232.2	528.8	1.0	1,005.8	10,021

1/ Includes butter equivalent of butteroil. 2/ Includes processed cheese held by USDA. 3/ Includes manufactured products for which current monthly series are available (excludes nonfat dry milk). 4/ Preliminary. 5/ Less than 50,000 pounds.

Table 29.--Dairy products removed from the commercial market by USDA programs, 1970-85

Year and month	Removals 1/					Solids content of removals			
	Butter 2/	American cheese 3/	Evaporated milk 4/	Nonfat dry milk 5/	Milk equivalent	Milkfat	Solids-not-fat	As a percentage of marketings	
								Milkfat	Solids-not-fat
	- - - - - - Million pounds - - - - - -							Percent	
1970	246.4	48.9	48.4	451.6	5,774	22.1	460.7	0.5	4.8
1971	292.2	90.7	111.4	456.2	7,268	276.4	489.8	6.6	5.0
1972	233.7	30.4	97.0	345.0	5,345	208.8	361.0	4.9	3.6
1973	97.7	3.2	53.7	36.8	2,185	84.2	47.0	2.1	0.5
1974	32.7	60.3	28.3	265.0	1,345	49.8	278.9	1.2	2.9
1975	63.4	68.2	24.5	394.5	2,036	77.7	405.6	1.9	4.2
1976	39.4	38.0	21.8	157.1	1,236	46.8	167.2	1.1	1.7
1977	221.8	148.2	15.9	461.7	6,080	230.8	494.9	5.2	4.8
1978	112.0	39.7	17.6	285.0	2,743	106.3	290.7	2.4	2.8
1979	81.6	40.2	16.4	255.3	2,119	81.7	261.8	1.8	2.5
1980	257.0	349.7	17.5	634.3	8,800	325.3	723.6	7.1	6.7
1981	351.5	563.0	18.6	851.3	12,861	471.7	999.2	9.9	8.9
1982	382.0	642.5	20.8	948.1	14,282	522.7	1,117.5	10.8	9.8
1983	413.2	832.8	24.6	1,016.0	16,814	610.2	1,285.7	12.1	10.9
1984 6/									
January	61.2	62.5	3.3	76.2	1,889	70.2	93.8		
February	47.2	42.4	2.3	64.0	1,398	52.3	75.5		
March	34.8	45.7	2.1	65.1	1,176	43.4	77.4		
April	19.2	55.0	1.8	71.1	944	33.8	85.9		
May	23.3	63.1	.8	86.8	1,105	39.7	103.3		
June	4.8	62.8	.9	72.3	720	24.7	89.1		
July	1.6	49.9	1.2	64.3	529	17.9	77.5		
August	2.3	21.8	1.8	52.3	267	9.4	57.4		
September	-2.4	9.3	2.0	29.4	46	1.4	31.5		
October	-.3	10.7	1.7	36.9	102	3.6	39.1		
November	.5	6.0	.2	24.1	70	2.5	25.1		
December	10.5	18.1	.8	36.0	397	14.6	40.5		
Total 7/	202.6	447.3	19.0	678.4	8,644.7	313.4	795.8	6.5	7.0
1985 6/									
January	49.9	34.6	.9	58.8	1,375	51.8	67.9		
February	44.6	46.1	3.6	54.9	1,384	51.4	68.1		
March	34.2	65.1	2.6	63.9	1,354	49.1	82.3		
April	36.6	74.4	3.0	86.8	1,496	54.3	107.3		
May	42.1	58.3	2.5	94.5	1,451	53.5	109.7		
June	29.2	69.1	1.5	109.3	1,290	46.6	127.0		

1/ Delivery basis, after unrestricted domestic sales. 2/ Includes butter-equivalent of anhydrous milkfat, PIK, and purchases under Sec. 709 and 4a. 3/ Includes purchases under Sec. 709 and 4a. 4/ Includes purchases under 4a. 5/ Includes PIK certificates and purchases under Sec. 709 and 4a. 6/ Preliminary. 7/ Totals may not add because of rounding.

Table 30.--Uncommitted CCC inventories, selected dates, 1970-85

Date	Butter	American cheese	Nonfat dry milk	Total milkfat basis
	Million pounds			Billion pounds
Dec. 1, 1970	86.8	---	42.9	1.8
Dec. 1, 1971	88.7	9.7	4.5	1.9
Dec. 1, 1972	72.5	---	---	1.5
Dec. 1, 1973	7.3	---	---	0.1
Dec. 1, 1974	10.3	12.8	154.1	0.3
Dec. 1, 1975	1/	1.1	431.1	2/
Dec. 1, 1976	27.0	7.7	391.8	0.6
Dec. 1, 1977	154.9	54.5	634.3	3.7
Dec. 1, 1978	176.4	9.2	538.5	3.7
Dec. 1, 1979	145.2	19.7	408.4	3.2
Dec. 1, 1980	274.1	184.0	521.4	7.5
Dec. 1, 1981	205.7	553.6	843.9	9.7
Dec. 1, 1982	378.4	786.0	1,216.5	15.6
Dec. 1, 1983	363.1	853.9	1,365.7	15.9
Jan. 1, 1984	341.7	838.3	1,372.3	15.3
Apr. 1, 1984	354.4	858.0	1,376.0	15.8
June 1, 1984	354.7	850.4	1,387.7	15.7
Oct. 1, 1984	255.3	767.6	1,203.6	12.9
Dec. 1, 1984	213.5	633.5	1,139.3	10.7
Jan. 1, 1985	186.9	602.3	1,120.2	9.8
Feb. 1, 1985	101.1	581.4	1,065.4	7.8
Mar. 1, 1985	122.5	542.1	998.1	7.9
Apr. 1, 1985	132.2	563.2	939.5	8.3
May. 1, 1985	144.2	586.2	964.4	8.8
June 1, 1985	163.5	601.1	967.8	9.3
July 1, 1985	168.8	620.3	974.1	9.6

1/ Less than 50,000 pounds. 2/ Less than 500,000 pounds.

UNITED STATES DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE
1301 NEW YORK AVENUE, N. W.
WASHINGTON, D. C. 20005-4788

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

FIRST-CLASS MAIL
POSTAGE & FEES PAID
USDA
PERMIT NO. G-145

Moving? To change your address send this sheet with label intact, showing new address, to EMS, Room 228, 1301 New York Avenue, NW, USDA, Washington, DC 20005-4788